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Magnetic Results 2005

EDITORS K. PAJUNPÄÄ AND H. NEVANLINNA


**NURMIJÄRVI GEOPHYSICAL
OBSERVATORY**

MAGNETIC RESULTS 2005

Editors K. Pajunpää and H. Nevanlinna

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<p>Abstract</p> <p>The magnetic yearbook of the magnetic recordings at the Nurmijärvi observatory contains tables, figures of hourly, monthly, and yearly means of the magnetic field components X, Y and Z as well as magnetic activity indices (K, Ak) in 2005. Magnetic isolines describing the distribution of geomagnetic field components in Finland 2006.0 are shown by a series of maps.</p>		
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1 Introduction

This report presents magnetic measurements carried out at the Nurmijärvi (NUR) Geophysical Observatory between January 1 and December 31, 2005. The observatory is operated by the Finnish Meteorological Institute (FMI) and is part of the Space Research Division of the institute. Information about the IMAGE magnetometer network is included in this report, as it is partly operated by the observatory. The Nurmijärvi Geophysical Observatory started recording the Earth's magnetic field in April 1952. The first yearbook was for 1953.

2 Description of the observatory

The observatory is located some 40 km NNW from Helsinki in the northern part of the Nurmijärvi municipality having about 36,000 inhabitants. The observatory lies on a moraine ridge by the lake Sääksjärvi. The 7 ha forest area of the observatory is limited to the lake in the North and North-East, to a nature reserve forest in the South and to a private forest in the West. There are no artificial disturbance sources nearby.

The coordinates of the observatory are:

	Lat.	Lon.
Geographical	60°30.5'N	24°39.3'E
Geomagnetic	57°43.8'	113°28.8'
Corr.geomagnetic	56°49.2'	102°31.2'

The magnetic coordinates are referred to the IGRF-95 model:

L-value	3.3
Height	105m

The Nurmijärvi observatory is running two digital magnetometers, which are controlled usually once per week with absolute measurements. An other magnetic recording system at the observatory is the three-component pulsation magnetometer of the Sodankylä Geophysical Observatory. The Air quality department of FMI makes continuous airborne radioactivity recording. An automatic weather station observes the following: temperature, humidity, snow depth, current weather and clouds. The Vaisala company installed at the observatory an automatic station as part of the Helsinki Testbed project. An automatic rain gauge is part to the system. Precipitation and snow depth are measured also manually at the observatory. Helsinki University operates the seismic station. Water level in the lake Sääksjärvi is recorded for the needs of the Nurmijärvi municipality.

3 Recording instruments

In the variation room the Danish suspended flux gate magnetometer (FGE-89) was the primary instrument. The Ukrainian LEMI-004 flux gate magnetometer was the second variometer. The sensors were directed in geographic North and East directions measuring the X, Y and Z components. The temperature in the variometer room was kept at $18 \pm 1^\circ\text{C}$. During cold seasons in the winter the temperature dropped down to about 16°C for a few days. The FGE magnetometer data was corrected for the temperature variations with coefficients -0.22 , -0.10

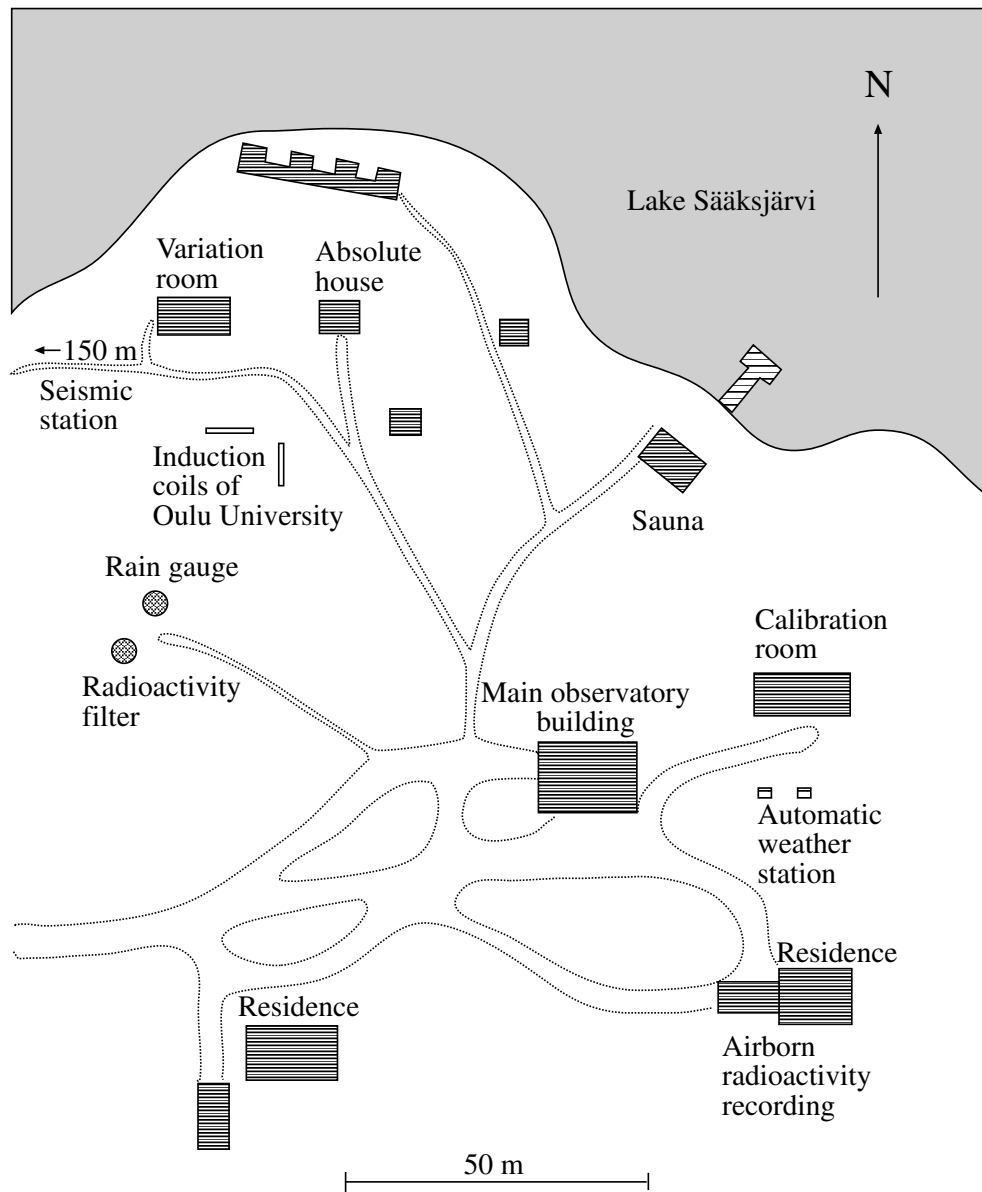


Figure 1: Formal map of the observatory.



Figure 2: The suspended FGE magnetometer sensor on the left and the electronics unit above.

and $-0.05nT/^\circ C$. Analog voltages from the magnetometers were AD-converted in the variation room and the digital data were transferred through optical wires to the computers in the main observatory building. The Linux based software stored the data in three files as one-second, ten-seconds and one-minute averages. Timing was based on GPS time sheared through the local network. The standard one-minute values were averages over one minute periods starting and ending at a half minute (e.g. 59:30 - 00:30, 00:30 - 01:30, 01:30 - 02:30). The given time was the starting minute at the centre of the period (00, 01, 02 etc.).



Figure 3: The LEMI-004 magnetometer electronics on the left and the sensor above.

4 Absolute measurements

The total field (F) was measured by a Polish PMP-7 proton precession magnetometer and declination and inclination with a DI-flux-magnetometer, which consists of a flux-gate element mounted on the telescope of a non-magnetic Zeiss-Jena theodolite (010B). The absolute measurements were done on average once a week. The base line values as determined for the FGE are shown in Fig. 7.



Figure 4: The magnetometer hut at the Pello (PEL) IMAGE station. The computer is in the house and data transfer is through optical wires.

5 Data processing and dissemination

In the processing the final base line values and sensitivities were used and hourly mean values were calculated. The measured base line values were followed closer than half a nanoTesla. All the digital data were visually inspected on the computer screen.

Tables showing the three-hour K-indices were computed from 10 s data using the 'FMI' algorithm. The upper limit for $K=9$ is $750nT$.

Electricity blackouts occurred in the Autumn causing gaps in the magnetic data. The longest blackout after a heavy snowfall lasted for over 30 hours on 30.11.-1.12. Another reason for short data gaps was in the software.

Daily magnetograms and K-indices were published in the monthly bulletin together with the Sodankylä Geophysical Observatory of the University of Oulu. The bulletin contains daily magnetograms of Nurmijärvi, Hankasalmi, Oulujärvi and Sodankylä, daily ionosond and riometer recordings and cosmic ray data.

Daily files of minute data were sent by e-mail for the INTERMAGNET system. INTERMAGNET CD-ROM 2003 was published in 2005 containing minute data, annual means and base line values from Nurmijärvi together with data from 91 other magnetic observatories.

6 IMAGE stations

The IMAGE magnetometer network consisted at the end of 2005 of 29 stations from Tartu in Estonia to Ny Ålesund on Svalbard. The principal investigator of this international project was Ari Viljanen at FMI. The observatory operated nine IMAGE stations in Finland (including Nurmijärvi) one in Estonia and one in northern Norway. At seven of the stations the service and absolute measurements were done



Figure 5: The magnetometer hut at the Tõravere (TAR) observatory in Estonia. A new concrete basement for secular variation measurements in the front.

in co-operation with the Sodankylä Geophysical Observatory of the Oulu University.

The data sampling interval at the IMAGE stations was 10 seconds and the 10-s values were averages over the seconds 00-10, 10-20, 20-30 etc. The time stamp given for the 10-second period was the first second of that period.

Data from most of the stations was transmitted through ISDN modems to Nurmi-järvi. TAR in Estonia and KEV and MEK in Finland had direct network connections and OUJ was still operated through an ordinary modem. The Hankasalmi (HAN) station was moved 7km southwest to a new site. The data of the nine stations was processed and inspected at the observatory and was sent to the AVA/FMI for IMAGE filing. Data transmission from the other IMAGE stations was also operated at the observatory.

The annual mean values were calculated for Oulujärvi ($64^{\circ}31'N$, $27^{\circ}14'E$) since 1993 (all days):

Year	X[nT]	Y[nT]	Z[nT]
1993.5	12971	1912	50591
1994.5	12953	1935	50616
1995.5	12951	1963	50642
1996.5	12937	1994	50664
1997.5	12926	2023	50701
1998.5	12912	2051	50742
1999.5	12902	2077	50780
2000.5	12892	2108	50828
2001.5	12889	2136	50867
2002.5	12886	2168	50914
2003.5	12870	2200	50961
2004.5	12878	2228	50998
2005.5	12867	2256	51035

7 SAMNET stations

The observatory provided 1-second data from the stations KIL, OUI, HAN and NUR for the SAMNET magnetometer network operated by the Lancaster University in United Kingdom.

8 Personnel

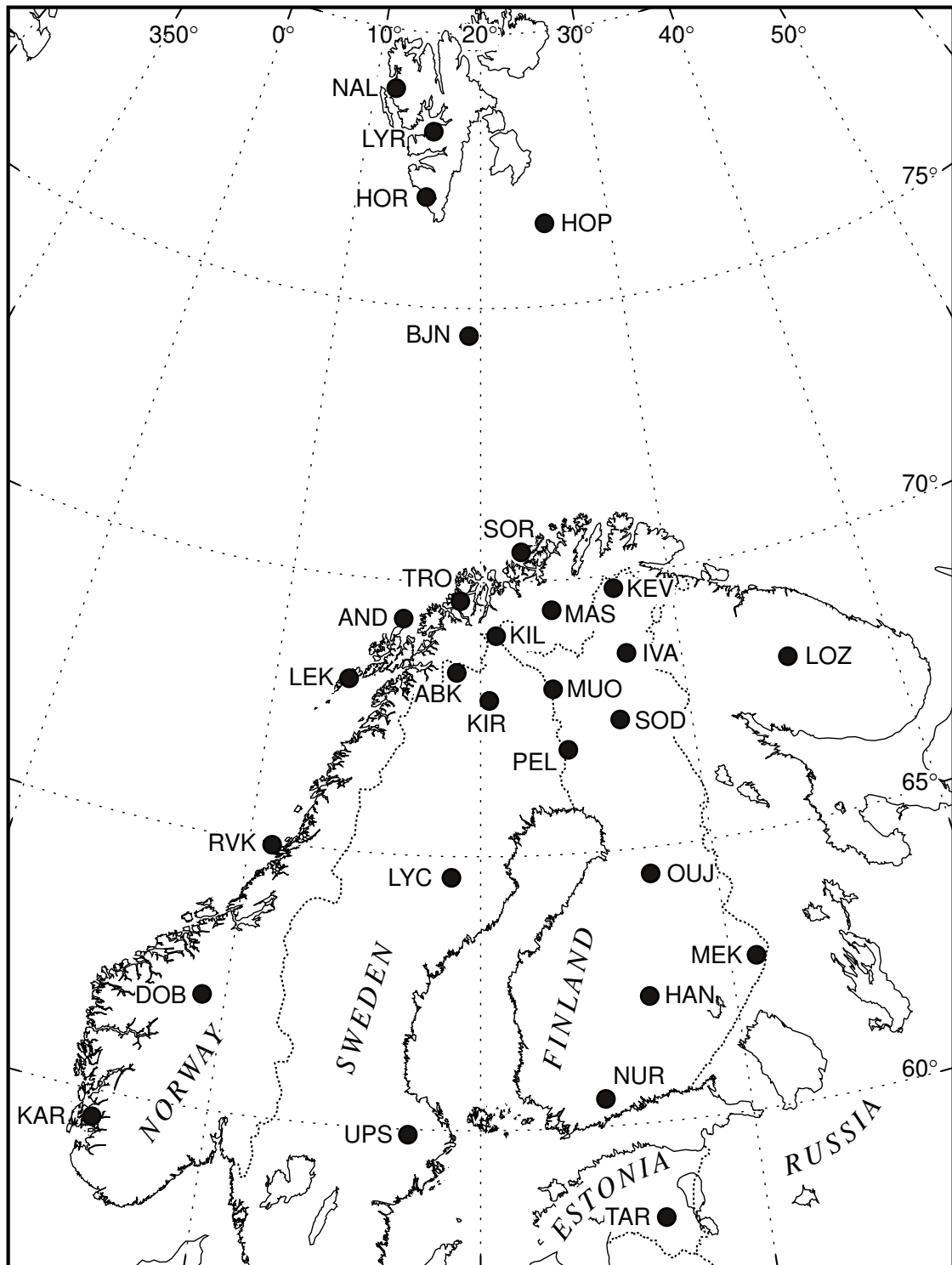
Ph.D. Kari Pajunpää, head of the observatory

M.Sc. Anja Koistinen, assistant

Mr. Pentti Posio, technician

9 IMAGE Magnetometer Network

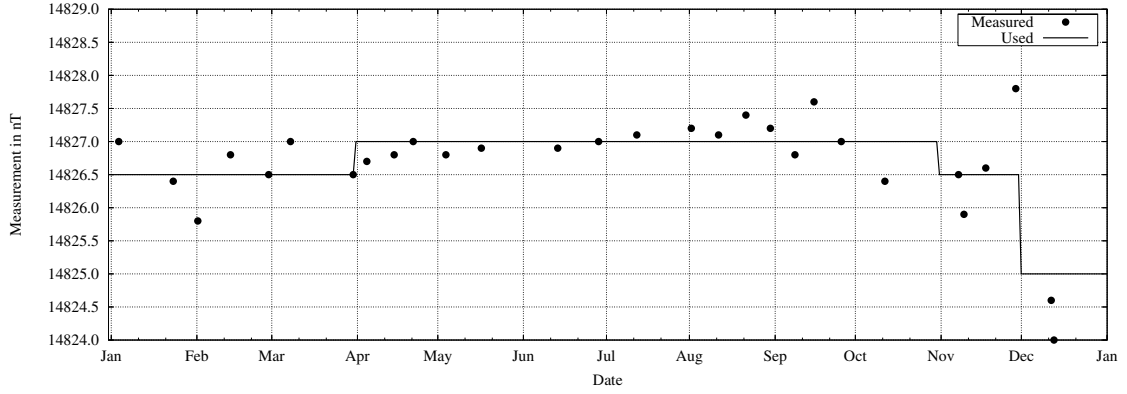
IMAGE Magnetometer Network



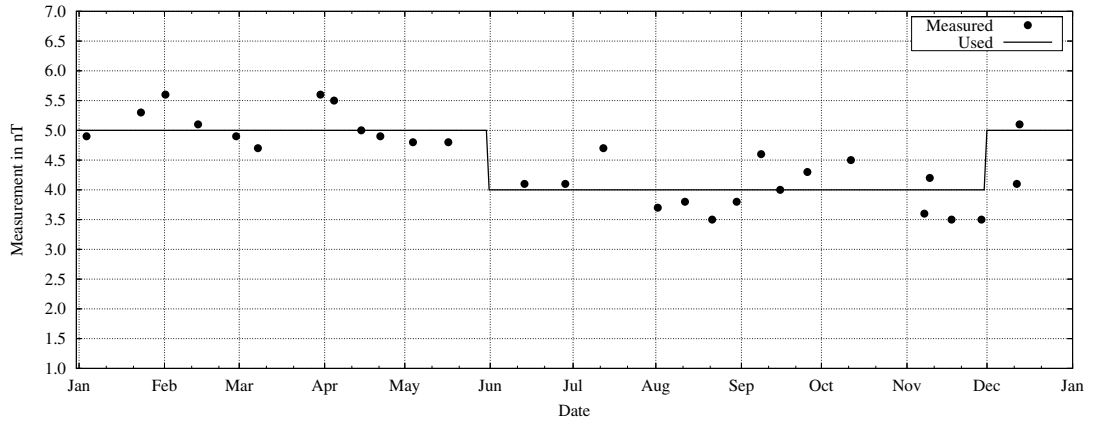
December 2004

Figure 6: Map of IMAGE magnetometer network

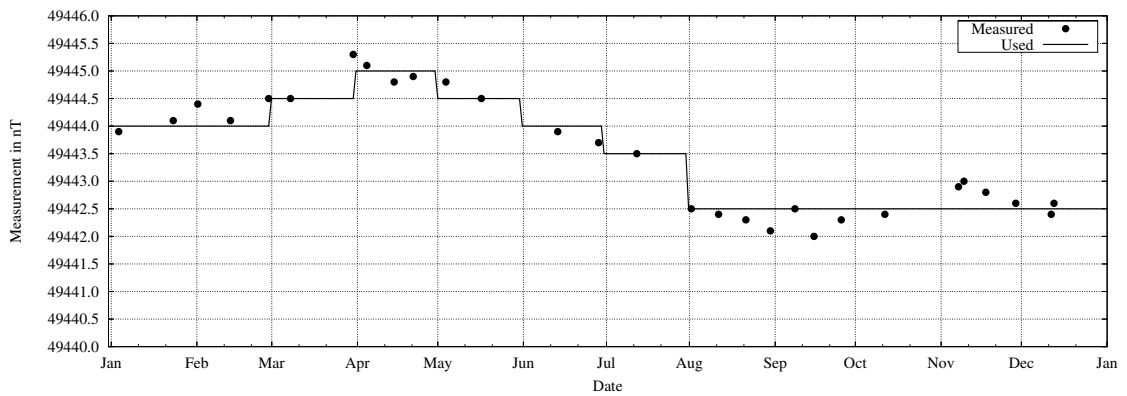
10 Baseline Measurements for FGE



(a) Baseline measurements for X component



(b) Baseline measurements for Y component



(c) Baseline measurements for Z component

Figure 7: Baseline measurements

11 Tables of Hourly Means of **X**, **Y**, and **Z**

Explanations of the tables:

- **X** is the North component of the magnetic vector
- **Y** is the East component of the magnetic vector
- **Z** is the vertical component of the magnetic vector
- The unit is nanotesla ($\text{nT} = 10^{-9} \text{ T}$)
- The time is universal time (UTC). The local time is $\text{UTC} + 2 \text{ h}$ (during the daylight saving time $\text{UTC} + 3 \text{ h}$)

Nurmijärvi Finland

January 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		-12	-14	-12	-9	-5	-13	-9	-6	-11	-16	-17	-15	-22	-20	-10	-14	-19	-20	-27	-53	-37	-28	-24	-34	-19	
2	D	-29	-19	10	-5	-26	-22	-15	-28	-34	-39	-30	-23	-18	-21	-32	-25	-37	-49	-43	-28	-43	-20	-58	-56	-29	
3		-44	-22	-18	-20	-28	-18	-14	-17	-25	-32	-44	-39	-37	-50	-54	-25	-36	-38	-35	-20	-4	-19	-23	-22	-29	
4		-18	-16	-13	-14	-21	-13	-14	-15	-21	-26	-25	-23	-31	-16	-23	-7	-47	-34	-13	-23	-19	-25	-23	-34	-21	
5		-32	-23	-18	-20	-10	-16	-17	-16	-35	-28	-29	-34	-35	-26	-19	-35	-6	-19	-27	-25	-21	-21	-7	-7	-22	
6	Q	-16	-16	-14	-14	-11	-10	-9	-10	-13	-16	-19	-20	-14	-10	-8	-10	-12	-12	-17	-6	-15	-14	-14	-15	-13	
7		-15	-15	-14	-13	-11	-9	-8	-10	-11	-12	-10	-14	-10	-7	-34	-91	-50	-29	-25	-21	-27	-49	56	-105	-22	
8		-149	-75	-72	-75	-53	-26	-31	-35	-21	-21	-34	-39	-27	-25	-27	-27	-27	-27	-24	-29	-34	-31	-23	-31	-28	-40
9	Q	-24	-24	-23	-20	-19	-17	-17	-19	-21	-25	-21	-27	-21	-18	-17	-17	-16	-15	-13	-13	-14	-15	-16	-16	-19	
10		-17	-17	-15	-12	-9	-9	-9	-15	-17	-18	-18	-12	-11	-9	-14	-17	-16	-19	-13	-14	-22	-15	-28	-24	-15	
11		-22	-19	-17	-15	-17	-16	-8	-16	-27	-23	-28	-24	-18	-15	-17	-27	-18	-4	-6	-4	-11	-16	-32	2	-17	
12		-24	-19	-44	-43	-17	-14	-18	-19	-19	-20	-28	-25	-20	-44	-20	-18	-26	-25	-40	-30	-12	-8	-22	-28	-24	
13		-25	-32	-31	-28	-38	-30	-13	-13	-16	-21	-27	-22	-15	-13	-21	-22	-26	-15	-17	-14	-29	-28	-10	-21	-22	
14		-12	-18	-21	-19	-18	-13	-10	-15	-19	-21	-26	-24	-18	-12	-9	-10	-12	-10	-10	-11	17	6	-53	-31	-15	
15		-12	-27	-24	-27	-20	-20	-24	-22	-27	-27	-31	-33	-24	-19	-20	-23	-22	-1	-18	-20	-7	-16	-16	-16	-21	
16		-17	-20	-12	-7	-13	-11	-15	-19	-20	-26	-27	-30	-14	0	-5	-8	-8	-16	-11	-6	1	-13	-10	-27	-14	
17	D	-30	-64	-20	-40	-34	-27	-22	-23	-22	-35	-25	35	-1	-6	23	54	467	227	19	-21	-30	-38	-35	35	13	
18	D	-134	-167	-82	-47	-78	-48	-47	-107	-152	-37	-54	-29	-13	-15	-10	-44	-45	-30	-20	-39	-54	-123	-54	-55	-62	
19	D	-40	-118	-79	-128	-88	-74	-40	-26	-43	-50	-19	-1	11	-6	-9	-33	-51	-29	-43	-37	-35	-48	-48	-45	-48	
20		-36	-39	-42	-32	-26	-24	-23	-32	-33	-32	-30	-27	-32	-18	-3	-26	-29	-39	-20	-21	-26	-23	-21	-30	-28	
21	D	-35	-22	-21	-20	-17	-14	-15	-18	-24	-29	-29	-29	-24	-20	-13	-13	-9	96	-74	-44	-170	-278	-522	-259	-67	
22		-141	-125	-99	-119	-70	-79	-51	-42	-44	-40	-44	-47	-34	-35	-27	-33	-22	-29	-37	-57	-25	-44	-33	-39	-54	
23		-47	-37	-44	-16	-29	-22	-24	-33	-37	-38	-31	-36	-29	-14	-17	-18	-17	-15	-22	-23	-20	-28	-16	-9	-26	
24		-25	-27	-26	-22	-20	-17	-18	-17	-22	-24	-24	-27	-28	-20	-14	-13	-26	-10	-15	-24	-21	-15	-14	-16	-20	
25	Q	-18	-17	-17	-16	-15	-14	-13	-16	-19	-24	-23	-19	-14	-12	-14	-22	-21	-20	-18	-15	-14	-16	-15	-16	-17	
26	Q	-18	-20	-20	-16	-13	-11	-14	-16	-22	-24	-24	-19	-17	-13	-10	-10	-10	-12	-14	-7	-11	-10	-12	-11	-15	
27	Q	-11	-12	-10	-8	-7	-7	-9	-10	-14	-18	-17	-13	-6	-3	-3	-4	-3	-4	-1	0	-3	0	0	0	-7	
28		-8	-5	-2	-5	-5	-1	2	-1	-8	-14	-14	-12	-11	-8	-7	-5	-6	-8	-8	-21	-24	-22	-11	-12	-9	
29		-12	-13	-6	-4	-1	7	5	-2	-4	-8	-27	-27	-12	-4	-13	-38	-16	-17	-28	-27	-27	-23	-27	-6	-13	
30		-21	-26	-18	-21	-13	-10	-10	-21	-27	-25	-37	-30	-24	-30	-16	-15	-23	-23	-21	-13	-10	-9	-4	-15	-19	
31		-13	-14	-8	-2	-1	-2	-3	-20	-22	-28	-32	-31	-53	-27	-26	-47	-32	-30	-32	-11	-10	-16	-13	-15	-20	
All		-33	-35	-27	-27	-24	-19	-17	-21	-27	-26	-27	-23	-20	-17	-16	-21	-7	-9	-22	-21	-24	-32	-37	-33	-24	
Quiet		-17	-18	-17	-15	-13	-12	-12	-14	-18	-21	-21	-20	-14	-11	-10	-13	-12	-12	-13	-8	-11	-12	-11	-11	-14	
Dist.		-54	-78	-38	-48	-49	-37	-28	-40	-55	-38	-31	-10	-9	-14	-8	-12	65	43	-32	-34	-66	-101	-142	-91	-38	

January 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		79	79	80	75	73	64	53	76	76	81	75	68	66	71	70	72	73	97	115	148	108	84	90	95	82	
2	D	84	105	96	72	37	78	65	88	82	95	84	78	75	78	83	147	105	112	105	95	113	207	125	118	97	
3		78	79	67	33	39	60	69	76	86	84	71	93	81	76	78	92	137	81	90	100	90	85	77	79	79	
4		73	94	63	80	80	75	75	72	75	79	77	72	83	81	97	132	82	85	99	100	90	86	83	78	84	
5		58	68	79	66	56	58	67	75	78	86	76	84	79	87	112	85	124	99	92	97	104	95	91	85	83	
6	Q	80	77	74	73	74	76	78	79	79	77	74	69	68	71	73	73	74	74	79	106	95	87	78	79	78	
7		78	78	78	77	77	78	80	81	82	80	72	69	68	70	71	118	96	50	81	100	134	130	293	160	96	
8		209	180	111	11	26	59	75	79	73	74	77	73	70	74	76	77	79	74	79	88	98	103	90	81	85	
9	Q	80	80	80	80	81	82	84	85	87	88	80	79	77	76	76	77	76	77	77	77	77	78	82	81	80	
10		81	78	76	74	74	75	77	79	79	77	71	68	68	71	69	68	64	63	68	69	83	115	95	93	76	
11		91	88	81	77	73	67	65	70	77	72	73	70	69	65	69	70	78	66	71	73	79	138	94	133	79	
12		124	101	116	70	101	92	83	79	81	67	66	66	59	77	81	107	71	73	121	106	98	103	87	97	89	
13		92	85	80	80	76	69	74	78	82	78	82	73	69	71	76	80	82	77	91	95	77	106	77	93	81	
14		94	95	82	81	82	72	74	87	87	85	78	71	65	70	72	73	72	76	77	77	139	143	140	155	89	
15		139	124	104	87	86	81	83	79	79	83	81	73	69	76	90	88	74	106	82	84	82	83	82	83	87	
16		78	77	63	77	78	81	81	84	81	84	72	68	64	61	69	75	75	71	77	78	88	86	100	105	78	
17	D	96	94	148	89	92	100	97	95	88	92	87	86	93	78	40	0	41	100	85	67	70	79	77	84	82	
18	D	99	104	103	86	27	87	128	173	83	96	61	73	80	104	165	135	89	79	110	84	123	132	84	99	100	
19	D	67	43	-23	-41	13	28	35	90	125	139	126	110	120	120	103	84	118	122	82	80	84	84	85	78	78	
20		76	76	77	77	81	85	88	92	103	97	90	82	76	73	74	77	89	186	90	94	85	90	95	76	96	90
21	D	72	72	85	86	87	89	87	85	83	83	86	74	73	72	78	94	89	221	113	183	64	184	288	194	110	
22		104	77	89	67	88	76	66	97	84	93	86	85	77	87	101	86	86	99	84	120	135	119	124	129	94	
23		99	89	93	86	80	84	90	93	84	81	74	71	73	73	88	88	85	86	96	99	99	90	81	117	87	
24		95	86	77	82	83	86	90	90	90	84	86	71	74	87	81	106	90	86	106	87	87	84	81	90	87	
25	Q	82	81	79	78	80	81	84	84	79	74	71	68	67	70	66	66	74	75	80	95	105	93	85	80	79	
26	Q	83	81	81	83	83	83	85	85	81	75	75	67	68	72	74	75	76	76	81	87	84	86	80	78	79	
27	Q	77	78	76	80	81	82	83	82	79	77	71	65	64	68	69	71	72	70	70	72	74	79	81	76	75	
28		76	69	76	74	74	74	80	82	81	78	73	68	67	69	72	72	74	71	75	88	130	97	84	82	79	
29		102	91	75	74	73	69	73	78	78	70	64	59	67	69	76	71	76	109	182	93	86	76	71	81	81	
30		111	87	72	67	43	75	75	79	78	78	73	73	71	65	87	77	71	82	104	90	85	81	86	90	80	
31		81	77	50	74	75	78	79	75	79	79	72	64	77	101	68	101	137	93	87	104	86	81	78	76	82	
All		91	87	81	71	70	75	78	85	83	83	78	73	73	78	80	85	87	90	89	97	96	104	102	98	85	
Quiet		80	79	78	79	80	81	83	83	81	78	74	70	68	71	71	72	74	74	77	87	85	81	79	78	78	
Dist.		84	84	82	58	51	76	82	106	92	101	89	84	88	90	94	92	89	127	99	102	91	137	132	115	99	

Nurmijärvi Finland

February 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-15	-10	-13	-12	-11	-9	-10	-13	-20	-28	-30	-37	-28	-19	-16	-25	-18	-17	-17	-16	-10	-10	-9	-8	-17
2		-10	-12	-11	-8	-11	-4	-4	-7	-16	-20	-24	-20	-14	-6	-12	-14	-18	-8	-13	-3	-11	-14	-9	-8	-11
3		-8	-6	-1	0	-27	1	-8	-17	-33	-25	-24	-20	-14	-11	-11	-12	-18	-17	-15	-10	-11	-6	-9	-13	
4	Q	-10	-10	-9	-11	-10	-8	-9	-13	-19	-22	-23	-22	-15	-8	-10	-9	-14	-14	-15	-16	-11	-5	-8	-8	-13
5	Q	-8	-7	-6	-6	-2	-2	-5	-10	-17	-26	-26	-21	-12	-3	0	0	-2	-3	-4	-2	1	0	0	0	-7
6		-1	-3	-4	-1	1	4	-5	-20	-19	-23	-26	-26	-14	-8	-7	-6	-13	-17	-19	-5	-16	-13	-10	-7	-11
7	D	-21	-17	-12	-1	2	-3	-7	-13	-11	-15	-20	-18	-8	-5	-45	-30	-15	-19	-23	-24	-61	-60	-128	-52	-25
8	D	-46	-28	-30	-56	-24	-21	-14	-14	-22	-34	-35	-27	-28	-44	-38	-25	-15	-34	-3	-38	-28	-32	-40	-21	-29
9	D	-33	-13	-21	-35	-37	-9	-23	-27	-28	-42	-59	-48	-33	-24			-11	-12	-19	-14	-15	-19	-27	-40	(-27)
10	D	-19	-26	-7	-9	-12	-15	-8	-22	-33	-40	-44	-35	-24	-19	-14	-14	-13	-3	-16	3	-18	-16	-13	-10	-18
11		-13	-13	-18	-22	-16	-8	-8	-12	-21	-27	-32	-38	-28	-23	-15	-12	-11	-12	-23	-19	-21	-33	-8	-15	-19
12		-12	-12	-14	-16	-8	-10	-5	-6	-13	-24	-31	-30	-25	-19	-11	-10	-13	-11	-10	-12	-9	-6	-6	-7	-13
13	Q	-8	-7	-9	-8	-6	-7	-3	-3	-7	-14	-22	-23	-21	-16	-9	-7	-5	-5	-12	-1	-9	-7	-6	-6	-9
14		-8	-10	-7	-7	-4	3	5	1	-10	-18	-25	-24	-24	-18	-13	-10	-9	-9	-18	-25	-17	-16	-13	-4	-12
15	Q	-8	-8	-7	-4	-4	-4	-4	-4	-7	-12	-19	-19	-16	-10	-7	-5	-4	-5	-5	-3	-2	3	-1	-3	-7
16		-8	-11	-2	-1	-1	6	1	-4	-11	-21	-28	-26	-17	-15	-21	-14	-10	-46	-38	-23	-18	-3	-9	-19	-14
17		-14	-13	-11	-15	-18	-15	-13	-14	-16	-18	-21	-23	-22	-17	-10	-3	-11	-11	-8	-4	-5	-12	1	-8	-13
18	D	-70	-52	-93	-62	-21	-19	-26	-26	-10	-18	-24	-29	-17	-2	-6	7	-30	-24	-26	-22	-26	-27	-28	-32	-28
19		-26	-23	-23	-21	-20	-13	-17	-28	-39	-34	-25	-26	-42	-26	-24	-26	-13	-19	-32	-31	-17	-29	-21	-22	-25
20		-1	-24	-20	-19	-19	-28	-18	-12	-12	-15	-21	-20	-17	-20	-19	-15	-16	-29	-22	-21	-33	-24	-18	-38	-20
21		-19	-30	-14	-22	-20	-18	-15	-19	-19	-20	-19	-19	-19	-15	-17	-18	-18	-13	-12	-11	-12	-12	-11	-15	-17
22		-12	-11	-9	-6	-4	-2	-3	-8	-11	-15	-20	-22	-16	-10	-6	-8	-8	-10	-15	-11	-7	-7	-9	-7	-10
23	Q	-7	-7	-6	-5	-3	-3	-2	0	-4	-10	-8	-5	0	-3	5	5	6	7	4	6	10	1	0	0	-1
24		0	1	2	3	3	5	2	1	-5	-11	-20	-19	-11	-22	-1	4	2	3	1	-1	-3	-4	-5	-4	-3
25		-5	-2	0	3	2	4	1	-4	-10	-28	-26	-29	-13	-10	-8	-10	-15	-20	-27	-20	-7	-4	-4	-7	-10
26		-17	-13	-10	-4	-5	-6	-4	-11	-16	-20	-27	-29	-24	-12	-13	-20	-16	-20	-14	-14	-16	-9	-8	-7	-14
27		-5	-5	-4	-2	-1	-6	3	-12	-17	-22	-26	-26	-24	-31	-12	-4	-4	-3	-4	-3	3	-3	-2	0	-9
28		1	-4	-1	1	3	1	-5	-16	-23	-26	-27	-35	-26	-13	-7	-8	-5	0	-3	-5	-3	9	16	-7	-8
All Quiet		-14	-13	-13	-12	-10	-7	-7	-12	-17	-22	-26	-26	-20	-15	-13	-11	-11	-13	-15	-12	-13	-13	-14	-13	-14
Dist.		-8	-8	-8	-7	-5	-5	-5	-6	-11	-17	-20	-18	-13	-7	-4	-3	-4	-4	-6	-3	-2	-2	-3	-4	-7
		-38	-27	-32	-33	-19	-13	-16	-20	-21	-30	-36	-31	-22	-19	-26	-15	-17	-18	-17	-19	-30	-31	-47	-31	-25

February 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		52	73	79	78	78	79	82	85	86	83	72	66	67	72	75	85	81	82	82	82	81	82	78	78	77
2		74	74	77	77	74	76	81	80	81	74	74	67	63	67	69	75	79	109	79	120	118	79	77	76	80
3		72	68	75	84	55	71	70	75	81	79	74	65	66	68	73	76	78	92	89	79	78	80	85	80	76
4	Q	77	77	78	79	79	81	85	89	87	78	73	71	68	72	75	81	79	86	85	85	83	82	82	80	80
5	Q	77	77	77	75	78	82	84	86	84	81	72	65	64	65	71	72	74	74	76	81	81	77	75	75	76
6		76	77	76	81	75	86	87	89	82	85	71	62	59	61	67	70	68	67	75	92	100	102	116	114	81
7	D	101	80	97	85	94	91	93	92	91	82	70	58	51	32	51	43	59	71	95	225	135	149	117	126	91
8	D	112	100	119	92	73	81	70	81	88	94	85	73	57	66	81	67	91	95	149	111	107	120	77	94	91
9	D	92	67	77	69	28	48	59	89	84	80	74	67	52	92	88	76	92	96	89	103	92	142	(80)		
10	D	96	102	91	96	83	82	89	91	95	88	79	72	78	72	104	67	73	102	90	129	88	87	73	78	88
11		81	84	79	68	66	80	87	92	93	88	77	83	70	58	72	77	76	73	90	137	103	73	93	89	83
12		81	75	82	79	85	85	89	95	95	91	78	69	64	65	69	73	75	72	92	77	80	80	80	79	80
13	Q	78	73	74	79	81	82	83	86	89	85	76	66	62	63	68	75	75	71	84	93	81	81	81	82	78
14		83	80	79	79	68	77	81	87	89	82	75	70	66	64	69	71	77	76	83	93	101	96	80	85	80
15	Q	82	80	78	77	78	79	81	83	84	78	71	66	63	63	70	73	73	73	73	76	83	84	79	79	76
16		81	69	80	83	83	85	83	86	84	77	65	46	42	39	48	32	28	70	105	84	84	106	123	109	75
17		91	87	86	86	83	84	86	89	89	86	79	66	65	64	67	68	60	67	70	76	80	99	96	105	80
18	D	112	198	188	108	106	100	84	56	71	68	69	67	62	56	49	78	77	74	94	110	101	92	92	78	91
19		79	84	84	85	85	82	73	79	70	61	62	49	67	62	60	67	79	111	114	98	85	98	90	86	80
20		93	90	85	86	89	84	71	82	85	80	74	71	65	66	60	87	69	59	74	103	86	88	110	99	81
21		90	110	99	97	86	83	86	85	80	75	70	64	66	63	63	65	69	74	73	78	80	81	85	86	80
22		82	81	80	82	79	81	82	85	84	78	71	69	66	66	70	73	76	84	74	76	81	82	83	81	78
23	Q	84	81	85	85	86	87	89	89	85	79	67	62	59	61	65	67	68	69	73	76	75	78	77	75	76
24		75	74	75	77	79	81	82	86	85	78	73	66	56	60	67	72	75	73	77	77	81	82	82	81	76
25		77	81	79	79	79	80	84	90	88	83	67	64	55	57	62	69	80	107	110	101	90	84	79	82	80
26		68	62	73	81	81	84	84	84	87	78	74	68	64	60	61	90	79	90	107	94	96	88	80	78	80
27		77	80	80	79	79	71	75	88	93	85	77	68	62	67	68	76	76	76	75	77	89	87	83	77	78
28		82	77	70	76	78	79	74	77	79	75	69	57	61	64	72	79	81	99	89	80	80	88	96	91	78
All Quiet		83	84	86	82	78	81	81	85	85	80	73	66	62	63	68	71	74	81	88	96	90	90	88	89	80
Dist.		79	78	78	79	80	82	84	86	86	80	72	66	63	65	69	74	74	74	78	82	80	81	79	78	77
Dist.		103	109	115	90	77	80	79	82	86	82	75	67	60	63	71	64	78	84	104	134	104	110	90	104	88

February 2005 Vertical component Z in nT (Z = 49600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		79	80	95	100	103	104	104	104	104	103	105	107	108	110	111	113	111	110	108	107	105	104	104	102	103	
2		101	101	103	104	104	103	102	102	103	105	104	105	106	107	108	109	114	117	107	107	93	100	101	100	104	
3		99	95	94	88	83	85	93	96	101	107	106	107	109	108	108	107	107	110	109	107	106	104	102	101	101	
4	Q	102	102	103	103	103	103	104	104	102	101	102	104	104	106	106	107	107	109	108	107	105	102	98	100	104	
5	Q	102	102	102	101	101	101	101	101	100	98	97	101	104	105	104	102	102	102	102	102	98	98	99	99	101	
6		99	98	95	92	91	90	94	99	102	98	92	96	103	105	105	104	114	120	113	90	103	96	79			
7	D	87	92	92	74	73	87	91	95	95	93	93	96	101	109	140	148	136	147	140	121	82	65	-37	37	94	
8	D	67	91	81	71	87	92	90	97	95	97	105	110	118	136	153	144	139	160	129	116	117	69	30	72	103	
9	D	79	67	78	86	85	87	92	103	107	103	112	118	120	142			130	134	123	112	115	70	42	41	(98)	
10	D	65	77	72	75	82	92	100	104	110	112	113	115	122	132	135	116	118	113	111	96	94	104	95	98	102	
11		103	102	101	91	96	99	101	106	103	101	107	117	115	118	114	111	110	112	123	122	100	94	94	100	106	
12		95	95	98	101	103	105	106	105	104	102	101	103	105	109	109	108	109	109	111	107	107	105	104	103	104	
13	Q	102	97	95	98	100	97	96	101	100	100	100	99	100	104	105	106	107	106	105	111	108	103	103	103	102	
14	Q	99	100	100	100	97	96	97	99	99	96	94	96	100	107	107	105	106	107	114	118	112	103	94	85	101	
15	Q	94	98	100	100	100	101	100	98	94	91	92	92	96	100	103	104	103	102	103	103	100	92	96	98	98	
16		98	95	94	96	99	97	98	100	99	97	95	97	101	119	131	165	212	170	139	122	111	70	92		114	
17		103	105	103	102	104	104	105	105	102	101	101	103	103	105	107	106	106	109	107	107	109	109	114	90	105	
18	D	-52	-191	-82	-4	61	91	92	89	98	99	102	106	115	123	138	206	140	127	130	125	114	111	109	102	81	
19		101	106	108	108	108	106	99	101	104	106	103	115	132	131	129	126	118	128	113	117	113	104	106	84	111	
20		55	81	102	104	105	103	99	101	102	103	105	106	111	114	116	131	123	133	131	129	124	129	117	107	110	
21		89	87	86	85	96	99	100	102	103	105	107	111	114	115	117	117	119	116	115	114	113	112	108	106	106	
22		108	107	107	106	104	103	103	103	100	97	99	103	106	108	109	108	110	112	114	116	113	111	109	107	107	
23	Q	106	103	103	103	103	102	98	102	92	88	91	96	99	101	99	99	99	100	101	101	100	100	99	99	99	
24		99	99	99	99	99	100	99	96	93	92	94	97	104	105	104	101	101	100	101	102	103	102	96	89	99	
25		89	96	98	98	99	99	99	98	95	95	97	99	99	104	105	108	117	136	131	123	109	99	98	96	104	
26		93	78	91	94	96	99	99	96	97	96	99	100	101	103	113	125	115	119	112	109	100	100	101	101	102	
27		102	101	101	101	101	97	94	96	99	98	99	104	104	113	111	108	105	105	104	104	101	96	95	97	101	
28		94	95	92	92	95	96	93	94	97	95	96	104	107	107	109	108	108	108	100	102	101	91	62	24	97	
All Quiet Dist.		88	84	90	92	96	98	99	100	100	99	99	100	104	108	112	115	117	115	120	116	112	106	100	89	91	102
		101	100	100	101	101	102	101	100	98	96	96	99	101	103	104	104	103	103	105	103	101	99	99	99	101	101
		49	27	48	60	78	90	93	98	101	101	105	109	115	128	141	153	133	136	127	114	104	84	48	70	70	

Nurmijärvi Finland

March 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-9	-5	1	0	-3	0	-3	-13	-20	-31	-32	-29	-19	-9	-4	-6	-6	-1	-2	-9	-6	-5	-3	6	-9
2		-11	-16	-15	-5	-9	-5	-4	-12	-30	-30	-20	-25	-17	-13	-7	-14	-19	-9	-7	-5	-3	-6	-3	1	-12
3		-7	-8	-7	-5	-4	-6	-5	-8	-15	-17	-17	-16	-11	-11	-6	-10	-5	-2	-9	-1	0	-5	-3	6	-8
4		-5	-4	-6	-2	-1	-1	-3	-9	-14	-17	-17	-11	-7	-6	-2	-1	-1	2	1	1	2	2	3	1	-4
5		2	0	-3	0	5	-1	0	-3	-7	-13	-15	-19	-20	-15	-14	-13	-3	-10	-19	-11	-24	-33	-25	-32	-11
6	D	-10	0	-16	-12	-7	-9	-16	-20	-33	-24	-30	-14	-15	-2	4	-1	-18	-48	-32	-16	-30	-33	-21	-78	-20
7	D	-84	-66	-50	-20	-13	-21	-49	-33	-20	-20	-19	-32	-30	-11	-33	-18	4	-9	20	-36	-29	-25	-35	-13	-27
8	D	-18	-48	-20	-46	-12	-12	-31	-41	-37	-32	-24	-30	-26	-19	-17	-15	-14	6	-4	-21	-33	-12	-32	-19	-23
9	D	-22	-45	-40	-24	-10	-18	-8	-12	-24	-22	-27	-22	-17	-13	-14	-2	11	-16	-20	25	-6	-34	-16	-15	-16
10		-27	-4	-28	-25	-21	-6	-6	-22	-30	-39	-33	-25	-15	-15	-2	-24	-18	-14	-2	-11	-7	-5	-7	-12	-17
11		-14	-15	-16	-12	-6	-7	-10	-15	-24	-24	-28	-22	-14	-9	-5	-7	-8	-7	-6	-7	-6	-6	-3	-6	-12
12		-9	-9	-12	-9	-6	-7	-12	-18	-27	-32	-31	-27	-21	-16	-13	-10	-8	-4	-5	-4	-5	-6	-8	0	-12
13	Q	-4	-7	-4	-3	-4	-2	-4	-11	-15	-17	-14	-10	-5	-6	-4	-10	-1	2	-5	-6	-5	-5	-5	-13	-6
14		-20	-29	-44	-20	-12	2	-7	-8	-19	-26	-33	-18	-5	-14	-36	-23	-14	-15	-18	-13	-13	-11	-13	-12	-17
15		-9	-13	-10	-10	-10	-11	-14	-19	-33	-43	-43	-32	-21	-12	-9	-8	-6	-5	-4	-5	-3	-2	4	-4	-13
16		-7	-7	-4	-2	1	1	-3	-8	-15	-23	-23	-14	-11	3	1	-13	-7	2	-8	-10	-11	-16	-12	-6	-8
17		1	-6	-11	-9	1	-2	-7	-19	-24	-29	-26	-30	-20	-10	-7	-7	1	1	-17	-6	-3	-5	-8	-13	-11
18		-12	-10	-10	-9	-8	-4	-8	-14	-25	-28	-26	-13	-5	-2	1	1	4	4	-25	-33	-22	-38	-24	-26	-14
19		-24	-22	-31	-21	-12	-15	-24	-27	-27	-29	-30	-22	-25	-13	-12	-13	-11	-10	-9	-8	-10	-8	-3	-7	-17
20	Q	-8	-9	-9	-6	-8	-7	-13	-18	-26	-30	-29	-22	-20	-14	-10	-10	-8	-5	-12	-16	-14	-15	-14	-11	-14
21		-11	-12	-13	-15	-13	-15	-22	-30	-36	-38	-32	-31	-30	-15	-5	-2	-6	-9	-6	-5	-12	-9	-1	-11	-16
22	Q	-11	-11	-11	-11	-10	-10	-13	-25	-35	-34	-32	-24	-15	-8	-1	0	2	2	0	0	2	0	-1	-2	-10
23	Q	-1	1	-1	0	1	-2	-9	-24	-34	-33	-29	-17	-4	4	6	6	-1	-5	2	-3	-3	7	5	-5	-5
24	Q	4	3	2	2	5	7	6	-1	-15	-21	-15	-3	8	-10	-5	-1	3	4	4	-9	-7	4	2	-2	-2
25	D	2	4	4	8	10	-7	-15	-24	-31	-37	-28	-17	-12	0	-14	-1	-13	-11	-20	-15	-10	-22	1	-20	-11
26		-13	-8	-4	-6	-16	-14	-24	-26	-38	-54	-42	-33	-30	-12	-19	-7	-9	4	-4	2	-4	-2	-2	-8	-15
27		-5	-13	-10	-8	-5	-5	-13	-30	-37	-42	-39	-31	-13	-12	-6	3	-10	3	-15	-20	-9	-10	-12	-20	-15
28		-13	-11	-6	-6	-5	-6	-10	-20	-32	-39	-36	-27	-18	-10	-5	-6	-4	-5	-3	-4	1	1	-7	-5	-12
29		-3	-2	-1	1	2	-1	-9	-18	-28	-31	-26	-19	-10	-1	3	1	-1	2	4	6	6	11	10	8	-4
30		1	0	-2	-1	-6	-6	-8	-19	-25	-38	-36	-21	-22	-10	-8	-7	-8	-13	-10	-3	-2	-2	0	-3	-10
31		-2	-3	-4	-7	4	8	2	-13	-36	-34	-31	-26	-13	-6	0	-2	-5	5	3	-24	-9	13	6	-3	-7
All	Quiet	-11	-12	-12	-9	-6	-6	-11	-18	-26	-30	-28	-22	-16	-9	-8	-7	-6	-5	-7	-8	-9	-9	-7	-10	-12
Dist.		-26	-31	-24	-19	-6	-13	-24	-26	-29	-27	-25	-23	-20	-9	-15	-7	-6	-16	-11	-12	-21	-25	-21	-29	-19

March 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		87	82	81	83	78	85	88	88	81	79	75	65	62	66	73	78	78	78	80	89	89	78	80	84	80	
2		91	81	65	82	85	83	84	89	86	78	66	67	67	66	75	79	119	87	77	78	85	82	78	78	80	
3		82	80	81	81	83	85	88	88	86	78	69	65	63	69	72	82	84	80	84	96	87	83	80	79	80	
4	Q	76	75	79	81	82	86	89	91	87	76	65	59	59	64	67	73	75	75	76	77	80	78	78	79	76	
5		78	80	82	82	84	84	80	79	82	85	82	68	62	55	49	52	71	71	57	69	89	103	121	169	129	82
6	D	100	123	128	99	101	100	107	78	62	63	60	58	54	59	46	83	116	84	140	152	116	124	61	112	93	
7	D	121	89	101	106	101	80	79	74	75	68	68	53	72	57	64	83	129	117	133	126	94	93	105	108	92	
8	D	83	117	117	76	71	96	80	70	81	87	77	71	71	74	79	82	99	114	103	101	72	120	75	73	87	
9	D	71	70	87	78	84	66	86	86	80	71	57	59	56	59	85	118	97	83	114	125	122	91	63	83	83	
10		108	98	97	82	95	92	89	94	93	83	71	58	52	72	73	116	94	78	87	84	78	83	76	80	85	
11		76	75	82	86	82	85	90	96	92	87	76	66	66	70	76	83	84	84	82	81	81	81	80	83	81	
12	Q	83	82	82	86	92	98	101	104	97	84	72	63	60	62	69	77	80	86	82	81	89	87	86	82	83	
13		82	84	86	88	88	88	91	93	87	73	60	53	47	52	59	67	70	71	89	80	82	93	122	132	81	
14		114	127	65	99	80	67	81	84	78	65	52	42	35	35	52	63	76	88	87	90	84	82	83	85	76	
15		93	84	87	88	89	93	97	97	92	85	70	60	58	63	73	79	78	78	78	79	80	85	82	90	82	
16		85	84	84	85	85	88	92	93	89	80	68	55	55	55	63	72	71	71	76	70	87	91	85	81	78	
17		108	110	110	87	88	91	90	93	83	73	55	56	60	65	70	71	76	132	79	76	79	86	90	89	84	
18		92	94	92	92	92	91	97	96	92	80	73	67	62	66	72	73	75	76	88	112	117	135	112	145	91	
19		151	132	110	91	98	100	96	90	84	79	71	58	62	68	76	82	81	81	82	83	84	88	84	83	88	
20	Q	82	83	84	83	85	93	99	102	96	85	73	60	55	56	66	71	77	79	86	86	87	93	96	95	82	
21		92	92	94	94	95	99	102	98	94	85	72	60	59	61	64	73	71	77	79	81	83	84	96	84	83	
22	Q	84	87	87	87	87	90	96	97	93	84	74	65	60	61	66	71	72	73	74	75	79	83	77	79	79	
23	Q	79	80	82	84	87	92	96	94	83	66	57	53	53	56	63	66	64	63	71	82	88	73	76	79	74	
24		77	81	83	85	88	89	92	89	84	74	62	54	51	51	67	69	72	73	74	79	103	87	79	80	77	
25	D	81	83	84	83	79	56	59	71	58	69	61	54	54	51	58	67	83	105	99	112	116	89	73	94	76	
26		85	86	88	89	78	84	87	87	90	87	67	50	58	56	70	82	85	105	91	98	99	92	82	76	82	
27		79	86	88	90	89	93	97	98	95	80	68	63	56	68	78	77	95	132	102	104	96	96	88	84	88	
28		79	80	78	80	83	94	100	103	98	87	70	60	58	62	71	79	85	84	83	83	86	88	87	80	81	
29		81	80	81	81	84	93	101	102	94	80	63	55	55	61	74	81	81	78	79	78	80	84	88	76	80	
30		89	92	92	82	85	78	91	85	86	74	56	44	46	53	63	75	82	105	88	86	88	84	82	80	79	
31		81	77	79	72	77	97	104	104	100	84	69	55	49	55	65	73	79	94	119	115	91	88	88	87	83	
All		89	89	88	86	86	87	91	91	87	78	67	58	57	60	67	77	84	87	88	91	91	92	88	89	82	
Quiet		81	81	83	84	87	92	96	98	91	79	68	60	57	60	66	71	74	75	78	80	85	83	83	83	79	
Dist.		91	96	104	88	87	80	82	76	72	73	67	58	62	59	61	80	109	103	111	121	105	109	81	90	90	

Nurmijärvi Finland

May 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-2	-1	-1	1	0	1	-11	-18	-30	-34	-37	-26	-15	-5	-2	-2	1	4	4	-1	5	-7	-2	-3	-8
2		-4	-5	-2	-1	1	0	-4	-14	-23	-29	-34	-26	-20	-7	-3	-1	-2	7	6	7	6	5	8	3	-5
3		4	13	8	12	7	5	-5	-16	-27	-29	-30	-23	-15	-4	3	3	3	7	7	3	11	10	1	2	-2
4	D	3	1	0	0	6	9	-2	-16	-32	-30	-20	-3	1	4	12	21	-5	2	-15	-39	-71	-21	-73	-82	-15
5	D	-204	-72	-60	-109	-49	-59	-70	-54	-36	-36	-18	-9	5	-4	20	3	13	-5	-10	-1	-13	-13	-13	-32	-34
6		-11	-14	-19	-14	-9	-13	-22	-38	-46	-47	-40	-25	-13	-13	-18	-15	5	-4	-5	-7	-14	-17	-15	-7	-18
7		-8	-19	-13	-12	-4	-10	-28	-39	-48	-51	-41	-27	-17	-11	-3	-8	-15	-10	-8	-7	-7	-5	-5	-6	-17
8		-4	-8	-7	-4	-2	-5	-8	-21	-37	-42	-40	-32	-21	-6	-3	-3	-2	-3	2	6	1	1	-1	-3	-10
9		-3	-7	-8	-3	2	4	-5	-19	-34	-41	-40	-28	-16	-6	-2	2	4	6	6	10	10	9	10	5	-6
10	Q	2	3	2	5	8	8	-3	-20	-32	-37	-32	-26	-15	-2	4	-3	0	4	7	8	7	6	5	3	-4
11		3	1	2	1	4	1	-7	-22	-37	-43	-38	-28	-13	-1	11	7	14	32	12	-6	-30	2	-14	-22	-7
12	D	-31	-62	-36	-76	-41	-32	-39	-49	-59	-72	-59	-32	-40	-9	15	19	-9	-16	-9	14	-8	-25	-9	-17	-28
13	D	-13	-8	-13	-33	-35	-17	-21	-29	-43	-55	-43	-17	-5	-8	-4	18	27	-13	-31	-26	-28	-18	-11	-60	-20
14		-21	-20	-34	-20	-16	-28	-22	-29	-42	-51	-58	-50	-31	1	-11	-6	5	-10	-9	-4	-1	-10	-14	-12	-21
15		-17	-20	-18	-15	-9	-12	-17	-29	-40	-45	-44	-31	-14	2	-6	-6	5	-14	2	-9	-13	-10	-6	-15	
16		-11	-4	-8	-9	-7	-9	-13	-23	-32	-38	-36	-26	-20	-11	-11	-9	1	5	-7	-3	-5	-6	-7	-8	-12
17		-6	-7	-8	-11	-5	-3	-13	-24	-32	-37	-32	-28	-25	-20	-10	-6	-4	2	3	4	1	3	2	-4	-11
18		-7	-8	-5	-3	-12	-22	-22	-23	-30	-36	-36	-23	-20	-6	1	5	-1	8	5	1	1	15	-5	-13	-10
19		-10	-15	-12	-10	-11	-14	-22	-36	-33	-29	-29	-16	-12	9	-6	-5	6								(-14)
20												-19	-40	-20	-32	-14	-9	-6	1	-4	-12	-14	-12	-9	-12	(-14)
21	Q	-11	-10	-7	-4	-5	-12	-21	-28	-34	-34	-30	-26	-17	-10	-8	-6	-5	-4	-4	-4	0	2	2	1	-11
22		-1	-2	-7	1	2	-7	-19	-30	-31	-31	-28	-21	-12	6	-11	-6	-2	2	13	-6	-2	3	16	7	-7
23		4	3	3	5	5	2	-5	-14	-18	-21	-20	-16	-10	-6	-7	5	1	5	4	19	5	4	7	3	-2
24		-6	-7	-9	-14	-7	-12	-14	-19	-30	-30	-26	-18	-12	-3	-2	0	4	6	7	5	0	9	9	4	-7
25		3	2	-4	-3	-2	-13	-27	-21	-27	-32	-29	-28	-18	-16	-7	3	-2	2	1	1	0	0	1	1	-9
26	Q	-1	-1	0	-1	-2	-6	-10	-14	-19	-23	-27	-21	-13	-6	-5	-3	1	2	7	7	6	3	3	4	-5
27	Q	2	4	6	7	6	3	0	-4	-12	-23	-30	-25	-15	-11	-9	-1	3	4	6	4	4	3	3	2	-3
28	Q	1	3	6	8	9	5	-1	-8	-16	-23	-26	-12	-2	5	10	10	8	10	10	12	8	8	8	1	1
29		8	8	10	12	11	3	-6	-17	-27	-26	-22	-24	-16	-19	8	12	15	26	20	15	-16	-12	-15	2	-2
30	D	-3	-37	-16	1	-10	-19	-21	-26	-39	-34	-35	-23	-1	11	-19	-4	27	22	22	-1	-12	-24	3	-9	-10
All Quiet		-12	-10	-9	-10	-6	-9	-16	-24	-33	-36	-33	-25	-15	-6	-3	1	3	3	0	0	-6	-3	-4	-9	-11
Dist.		-49	-36	-25	-43	-26	-24	-30	-35	-42	-45	-35	-17	-8	-1	5	11	11	-2	-9	-11	-26	-20	-20	-40	-22

May 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		84	83	83	85	89	98	99	100	100	91	76	62	55	53	61	71	73	75	78	87	89	85	84	85	81
2		85	82	88	90	92	97	101	101	95	81	70	62	57	55	61	70	82	74	73	74	77	80	82	85	80
3		85	89	96	92	92	98	98	98	90	79	67	56	52	56	64	77	80	73	75	70	73	73	85	84	79
4	D	94	96	97	96	90	97	98	97	88	74	63	46	42	50	56	69	78	129	176	119	92	144	161	150	96
5	D	139	112	117	113	81	111	88	67	86	78	81	70	78	81	102	91	117	104	97	91	93	67	114	98	95
6		91	94	96	92	101	108	115	109	96	79	61	56	52	48	57	76	91	81	88	99	106	97	67	77	85
7		88	91	86	86	93	104	109	105	94	80	62	55	52	54	73	76	80	82	81	82	83	85	83	83	82
8		80	88	80	89	93	100	109	107	99	84	65	52	52	59	69	77	81	81	82	95	90	84	83	84	83
9		83	80	79	83	90	100	107	105	96	80	64	49	46	52	63	71	75	76	76	79	83	82	82	83	79
10	Q	84	83	84	88	91	99	105	105	95	82	65	52	48	57	69	78	81	80	80	80	79	80	81	84	80
11		84	85	85	86	89	100	106	105	97	83	63	49	44	47	49	55	55	59	59	78	104	120	109	138	81
12	D	105	107	83	100	77	80	103	103	96	88	61	40	42	43	59	88	74	78	82	150	97	91	116	98	86
13	D	73	87	93	102	89	72	72	90	79	80	77	54	81	70	57	72	148	113	105	87	60	94	125	111	87
14		98	89	92	92	99	95	93	88	89	83	67	49	56	73	73	77	99	83	76	79	110	101	88	94	85
15		95	82	92	93	91	95	96	96	89	82	72	60	62	64	69	83	83	93	93	87	90	91	85	72	84
16		84	83	86	93	96	100	102	101	95	84	72	58	55	60	66	75	82	85	96	84	84	86	90	85	83
17		83	83	81	83	88	102	108	106	101	91	72	54	52	56	64	73	81	84	88	89	89	92	93	90	83
18		88	88	90	90	86	92	90	98	90	75	60	44	46	54	61	67	82	90	88	85	84	94	109	102	82
19		94	96	107	113	109	102	96	95	84	76	62	49	48	49	61	68	71								(81)
20												61	49	48	55	68	85	76	84	90	115	102	91	82	79	(77)
21	Q	78	75	84	97	100	105	105	99	90	80	70	66	65	68	76	81	86	90	87	84	82	80	82	75	84
22		64	71	87	101	111	116	108	100	89	79	71	66	62	66	85	80	81	82	89	96	85	86	88	92	86
23		88	90	94	98	105	108	108	99	88	78	69	58	58	66	75	77	88	90	88	91	98	87	84	85	86
24		84	73	82	89	100	105	106	97	85	77	67	61	61	66	70	75	81	79	96	92	89	81	82	81	82
25		91	95	92	88	97	98	93	91	85	75	60	50	53	62	67	75	82	86	93	87	83	83	77	75	81
26	Q	86	89	92	96	96	95	95	90	85	76	63	49	49	57	66	73	78	80	82	86	92	88	85	86	81
27	Q	87	88	90	94	94	94	95	97	94	84	67	51	49	57	66	76	83	86	84	84	81	83	83	84	81
28	Q	85	86	89	92	97	101	104	105	102	92	77	66	62	64	72	80	81	82	81	80	93	86	82	84	85
29		86	86	91	95	102	106	106	102	89	79	65	52	46	50	55	69	76	72	69	74	100	105	108	99	83
30	D	93	93	132	117	115	118	110	105	88	72	60	49	45	54	57	59	93	97	95	98	105	92	127	106	91
All Quiet		88	88	91	94	95	100	101	99	92	81	67	54	54	58	66	75	84	85	88	90	89	90	94	91	84
Dist.		84	84	88	93	96	99	101	99	93	83	69	57	55	61	70	78	81	83	83	83	86	83	82	82	82
		101	99	105	105	90	96	94	92	87	79	68	52	57	60	66	76	102	104	111	109	89	88	129	113	

Nurmijärvi Finland

April 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1	D	-25	-34	-46	-23	-29	-45	-24	-27	-35	-52	-42	-28	-8	-2	6	31	15	15	6	-14	-16	-10	-8	-6	-17	
2		-18	-17	-10	-10	-12	-19	-21	-20	-21	-27	-24	-14	-10	-5	10	12	-3	2	7	10	-1	1	-1	-4	-8	
3		-10	-22	-14	-4	-8	-19	-23	-25	-30	-36	-33	-30	-12	13	10	16	1	6	1	-3	-3	-5	-10	-8	-10	
4		-13	-15	-21	-19	-17	-27	-25	-24	-24	-21	-14	-7	-1	-5	-10	5	4	4	4	1	8	-4	-5	-5	-10	
5	Q	-5	-5	-5	-6	-6	-11	-17	-23	-28	-33	-14	-7	-4	2	1	13	8	10	6	7	5	7	5	-4	-4	
6		4	4	0	-2	-9	-16	-23	-28	-29	-27	-18	-12	-6	5	-2	9	9	19	16	22	22	11	8	14	-1	
7		9	8	9	8	3	-3	-11	-20	-23	-20	-15	-10	-15	13	-6	-3	5	13	28	33	15	11	-17	-35	-1	
8	D	-44	-88	-134	-99	-55	-71	-86	-87	-61	-44	-30	44	41	456	316	180	212	53	25	-22	-58	-37	-17	-49	14	
9		-48	-66	-63	-39	-26	-21	-22	-32	-46	-50	-52	-42	-29	-25	-23	-21	-5	-13	-12	-14	2	-13	-40	-53	-31	
10		-17	-17	-18	-26	-23	-30	-40	-31	-34	-36	-32	-20	-18	-7	-11	-15	-14	-15	-10	-4	-7	-14	-13	-20	-20	
11		-14	-10	-6	-7	-10	-14	-20	-32	-38	-39	-43	-36	-13	-21	15	10	2	7	28	-3	-6	-14	-32	-24	-13	
12		-10	-4	-4	-15	-18	-11	-18	-36	-52	-44	-34	-20	-17	0	14	16	5	1	18	10	-3	-8	-35	-11	-12	
13		-36	-33	-37	-18	-22	-20	-40	-58	-56	-52	-57	-33	-14	9	33	6	6	11	-1	-7	-5	-14	-12	-13	-19	
14		-11	-9	-10	-6	-6	-13	-22	-30	-39	-33	-31	-21	-13	-6	-6	-6	-3	10	13	-8	-12	-12	-14	-14	-12	
15	D	-14	-12	-1	16	11	14	-339	-351	-204	-96	-52	-54	-57	-88	-68	-47	-25	1	5	4	-33	-39	-50	-80	-65	
16	D	-47	-70	-59	-86	-128	-238	-172	-62	-47	-57	-17	-22	-7	28	61	37	33	-8	-29	-33	-40	-61	-53	-55	-47	
17		-63	-44	-49	-71	-89	-84	-73	-59	-47	-36	-30	-12	-10	-24	-18	-7	46	5	-20	-22	-36	-49	-39	-37		
18		-36	-43	-41	-29	-33	-47	-47	-54	-50	-45	-38	-22	-17	-4	-13	-4	-10	-8	-13	-18	-17	-17	-20	-16	-27	
19		-16	-16	-12	-14	-18	-24	-37	-26	-29	-28	-33	-3	-3	-4	-1	4	-3	-6	-13	-6	-3	-4	-2	-6	-14	
20		-11	-12	-3	1	-11	-84	-76	-76	-67	-45	-30	-36	-30	-26	-19	-14	-6	-3	3	-3	-8	-1	-21	-36	-26	
21		-25	-17	-15	-34	-30	-62	-64	-56	-51	-57	-46	-19	-9	-4	25	21	-13	-7	-8	-22	-6	-29	-20	-23	-24	
22		-26	-50	-48	-15	-17	-22	-22	-32	-34	-43	-44	-49	-22	-23	-7	1	3	-1	-3	-7	-8	-6	-10	-12	-10	-20
23		-9	-3	-1	-4	-11	-19	-34	-44	-52	-48	-39	-26	-5	26	25	16	6	0	-6	-6	-10	-9	-9	-7	-11	
24	Q	-8	-2	-1	-1	-3	-9	-20	-37	-53	-57	-45	-31	-18	-7	-7	-1	4	8	8	9	1	1	9	6	-11	
25	Q	-2	2	7	7	3	-6	-19	-30	-32	-33	-30	-25	-13	-6	-4	5	13	6	7	4	-2	-4	-4	-3	-7	
26	Q	-2	1	4	7	5	-2	-10	-24	-35	-43	-42	-33	-21	-9	-3	2	4	8	8	7	4	2	0	1	-7	
27	Q	3	6	6	6	3	-4	-9	-21	-36	-36	-34	-28	-21	-8	-7	-1	7	11	10	9	8	5	5	4	-5	
28		4	5	6	6	4	1	1	-2	-13	-37	-42	-21	-13	0	5	25	58	32	30	-9	-45	-31	-17	-22	-3	
29		-22	-3	-1	-11	-33	-41	-45	-53	-51	-44	-38	-31	-12	2	16	18	39	43	37	27	16	30	16	-51	-8	
30	D	-30	-9	4	-28	-20	-30	-53	-143	-142	-85	-55	39	178	302	384	178	26	43	-49	-108	-70	-103	-38	-28	7	
31		-51	-56	-55	-54	-36	-35	-39	-46	-50	-59	-59	-35	-37	3	-13	-18	-10	-12	9	-1	2	0	-7	-15	-28	
All Quiet		-19	-20	-20	-18	-21	-33	-47	-51	-49	-44	-36	-21	-8	19	23	15	13	7	3	-5	-10	-14	-15	-19	-15	
Dist.		-3	0	2	3	1	-6	-15	-27	-37	-40	-33	-25	-15	-5	-4	1	8	8	9	7	3	2	3	3	7	
		-32	-43	-47	-44	-44	-74	-135	-134	-98	-67	-39	-4	29	139	140	76	52	21	-8	-35	-44	-50	-33	-44	-22	

April 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	D	105	72	75	75	98	103	95	90	75	71	62	56	69	64	69	82	89	92	84	106	92	80	86	87	82
2		85	87	91	96	101	100	100	97	86	74	64	53	52	59	73	78	80	82	84	93	88	87	85	88	83
3		75	73	91	109	108	107	94	92	86	73	57	48	54	69	83	89	85	97	91	85	102	97	88	84	85
4		80	85	93	92	99	101	90	85	77	68	60	55	58	66	73	85	87	90	88	87	90	94	87	85	82
5	Q	85	93	102	107	112	110	100	90	80	69	55	49	54	58	65	74	76	82	88	81	80	82	82	84	82
6		88	92	99	106	108	109	104	97	86	70	58	53	61	63	70	71	75	80	78	76	73	85	79	81	82
7		83	88	99	105	111	113	107	98	86	73	59	46	47	53	61	70	78	80	84	91	87	79	98	109	84
8	D	119	123	72	94	109	131	93	81	75	69	51	23	-13	-102	-5	-2	36	61	77	161	105	92	118	105	70
9		100	105	117	112	112	115	111	106	98	86	75	66	66	74	82	87	92	94	94	91	92	100	116	98	95
10		106	96	75	80	87	101	103	104	100	93	83	69	66	67	73	81	85	88	89	92	99	103	95	91	89
11		94	99	102	107	109	111	118	114	97	86	73	65	60	67	69	71	80	80	118	100	88	105	105	90	92
12		92	95	107	108	87	99	101	101	87	78	75	65	64	68	68	75	90	85	78	103	103	115	116	115	91
13		112	130	96	90	95	100	91	79	89	77	63	61	61	62	61	80	77	90	81	82	83	117	81	89	84
14		93	95	97	111	115	112	105	99	89	78	67	58	61	73	81	84	82	83	87	97	86	85	86	87	88
15	D	84	83	61	78	101	124	217	218	171	101	87	88	84	95	99	94	86	68	70	109	142	143	127	113	110
16	D	139	119	110	94	82	60	95	106	105	91	82	82	74	70	73	78	85	91	89	90	94	104	110	105	93
17		103	105	92	66	56	89	108	103	105	103	95	89	94	86	84	84	101	95	105	111	113	106	101	92	95
18		99	98	80	97	92	98	97	95	89	85	84	82	91	83	76	86	91	89	88	87	90	86	86	90	89
19		91	89	100	106	110	107	100	97	94	84	78	73	72	78	80	84	88	90	91	86	82	84	87	91	89
20		94	93	100	108	113	88	102	92	67	59	67	58	71	80	80	79	82	81	80	84	86	87	105	114	86
21		117	109	119	108	94	89	85	85	89	81	66	61	61	67	79	73	87	92	95	95	98	98	88	86	88
22		73	65	78	108	107	108	107	101	92	84	76	72	77	81	79	81	86	85	84	85	88	89	95	92	87
23		84	92	101	109	106	105	104	100	91	74	60	58	59	55	66	87	93	98	90	84	84	84	83	84	86
24	Q	89	96	104	112	115	111	106	98	86	73	59	50	53	62	75	82	89	92	91	87	84	82	85	88	86
25	Q	89	96	106	111	117	116	109	95	83	73	62	55	59	65	72	81	86	90	86	85	85	86	89	90	87
26	Q	91	94	100	107	109	111	115	107	95	83	69	58	58	61	69	79	86	86	85	83	83	82	85	88	87
27	Q	89	93	100	106	112	112	106	101	91	77	65	58	55	60	68	76	82	81	80	81	83	84	86	88	85
28		89	95	101	109	117	114	110	102	87	68	50	41	41	43	50	54	60	71	93	129	147	107	91	88	86
29		93	111	127	132	118	115	117	95	74	75	66	60	58	57	60	63	62	56	55	65	85	85	89	129	85
30	D	142	117	117	116	118	122	114	101	79	92	82	57	50	16	9	73	63	39	69	131	93	159	109	81	90
31		76	101	100	85	114	130	123	111	98	86	76	61	60	64	87	80	77	85	85	85	92	94	93	86	90
All		95	96	97	101	104	107	107	101	90	79	69	60	61	60	69	76	81	83	86	94	93	95	95	93	87
Quiet		89	94	102	108	113	112	107	108	87	75	62	54	56	61	70	78	84	86	86	83	83	83	85	87	85
Dist.		118	102	87	91	101	108	123	119	101	85	73	62	53	29	49	65	72	70	78	119	105	116	110	98	98

Nurmijärvi Finland

June 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-17	-13	-9	-9	-21	-25	-33	-45	-59	-50	-42	-23	-22	-13	-12	-11	-16	-8	-4	-2	-1	-6	-8	-8	-19
2		-9	-8	-15	-8	-6	-12	-25	-35	-35	-37	-30	-28	-18	-15	-4	8	4	9	12	7	0	3	6	-4	-10
3		-7	-1	1	1	-3	-20	-34	-39	-42	-35	-26	-20	-11	5	3	-3	3	-6	4	-2	2	-4	-2	-1	-10
4		2	-1	-8	-6	-7	-9	-14	-25	-36	-39	-29	-30	11	11	41	35	46	3	29	0	-27	-6	-28	-5	-4
5		-20	-14	-12	-13	-12	-25	-53	-54	-54	-48	-46	-20	-6	-10	-12	6	4	12	26	-1	-11	-8	-18	-20	-17
6		-27	-9	-31	-28	-8	-19	-36	-48	-49	-49	-48	-35	-22	-11	-10	-5	6	18	18	11	3	-9	-25	-16	-18
7		-24	-26	-22	-47	-44	-43	-40	-34	-42	-49	-45	-35	-14	-17	-6	-12	-7	0	2	-5	0	0	-16	-15	-23
8		-16	-17	-18	-16	-16	-24	-35	-47	-51	-50	-45	-37	-21	-18	-9	-1	9	7	6	6	1	-2	-4	-8	-17
9		-7	-5	1	4	3	-3	-12	-22	-33	-41	-44	-28	-15	4	20	12	4	0	6	8	4	2	-2	-6	-6
10	Q	-3	0	6	6	2	-6	-19	-33	-46	-50	-40	-27	-14	-7	-4	3	3	9	15	12	7	3	-1	-4	-8
11		-4	-3	-1	4	-2	-4	-11	-24	-29	-33	-26	-27	-8	6	16	18	14	7	12	15	10	6	2	-2	-3
12	D	3	10	7	5	-1	-13	-31	-22	-9	0	1	-8	2	42	51	19	52	84	74	-88	-138	-200	-430	-281	-36
13	D	-96	-115	-70	-94	-108	-123	-93	-59	-60	-57	-37	-7	32	8	14	14	6	2	5	-4	-6	-12	-10	(-38)	
14		-13	-10	-5	-8	-18	-25	-31	-31	-33	-38	-34	-32	-24	-4	11	-1	2	2	27	30	-4	-15	14	16	-9
15		8	17	20	1	-19	-6	-16	-43	-59	-55	-43	-27	-3	-7	-10		8	11	11			3	2	3	(-10)
16	D	1	2	1	1	-2	-6	-7	-5	-11	-21	-39	-25	-52	-28	41	9	21	39	26	13	9	10	1	-19	-2
17		-27	-51	-70	-37	-16	-17	-26	-33	-32	-34	-31	-21	-23	-19	11	13	13	-2	15	-2	-3	-8	-8	-6	-17
18		-2	-4	-2	-3	-11	-8	-11	-20	-23	-21	-20	-23	-18	-8	-12	0	9	4	8	10	0	-8	-12	-9	-8
19		-8	-4	-8	-8	-10	-13	-13	-15	-26	-36	-27	-19	-11	-3	-13	21	3	5	7	6	2	-3	-3	-1	-7
20	Q	-2	-2	1	0	-2	-10	-18	-29	-29	-29	-24	-10	-20	-6	-1	9	13	11	6	6	2	-2	-3	-2	-6
21	Q	-2	0	0	1	0	-5	-12	-17	-21	-24	-23	-23	-14	-7	-2	4	1	3	11	11	15	15	14	14	-3
22		16	14	14	14	7	-2	-11	-15	-18	-24	-16	-16	-6	0	4	8	9	11	17	19	13	6	-3	6	2
23	D	-14	-3	2	-25	14	8	-34	-103	-122	-72	-61	-26	12	-38	0	19	-9	6	0	-2	-29	-15	-11	-17	-22
24		-5	-34	-39	-44	-31	-34	-34	-44	-54	-45	-37	-29	-17	-22	-16	-18	-16	-9	-5	-6	-7	-8	-6	-8	-24
25		-11	-12	-16	3	-5	-13	-24	-33	-40	-39	-34	-21	-17	-8	-7	-1	34	32	20	10	0	-8	-21	-29	-10
26		-16	-15	-16	-25	-26	-18	-16	-17	-36	-39	-33	-10	-8	10	10	9	8	10	0	-3	-4	-6	-6	-8	-11
27		-9	-10	-10	-9	-11	-15	-18	-24	-35	-41	-42	-31	-17	-2	-7	-3	10	11	15	17	16	9	6	2	-8
28	Q	2	2	4	2	-5	-5	-7	-11	-18	-23	-23	-14	-10	-12	-9	-2	-4	5	14	17	12	8	6	4	-3
29		6	-1	6	6	0	-6	-9	-11	-22	-32	-40	-33	-8	-5	-3	8	7	8	9	9	8	8	7	7	-3
30		8	8	10	9	-1	-3	-9	-14	-16	-12	-14	-22	-13	2	8	2	16	15	13	19	15	13	7	14	2
All		-10	-10	-9	-11	-12	-17	-24	-32	-38	-37	-33	-23	-12	-5	3	5	8	10	13	4	-4	-8	-18	-14	-11
Quiet		-3	-2	0	0	-3	-8	-15	-23	-30	-33	-30	-21	-15	-7	-4	2	5	8	12	13	10	7	5	3	-5
Dist.		-21	-21	-13	-24	-21	-29	-36	-43	-48	-38	-33	-19	1	-1	29	19	23	27	-16	-38	-53	-96	-67	-20	

June 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		89	89	107	120	120	119	113	108	100	85	67	57	62	71	85	88	90	92	89	86	83	87	86	88	91
2		88	92	96	106	118	116	107	94	85	70	57	56	59	68	78	83	83	82	82	81	87	82	93	104	86
3		95	90	105	114	117	115	110	105	91	83	67	59	58	66	79	87	88	85	84	82	86	86	87	90	89
4	D	93	96	91	106	112	113	115	112	98	79	60	44	32	31	39	58	50	72	76	123	112	99	91	93	83
5		125	100	127	112	120	117	121	103	83	70	57	50	54	65	76	79	90	95	103	88	85	56	76	98	90
6		96	109	105	92	119	121	124	114	101	89	76	67	63	70	78	84	88	89	86	86	90	88	77	108	93
7		112	100	104	100	95	101	121	110	104	91	74	59	63	65	71	83	86	88	86	88	103	98	93	91	91
8		103	99	91	103	113	115	116	106	92	77	68	60	54	55	63	74	82	87	92	92	89	87	87	83	87
9		91	101	113	117	119	121	118	113	102	82	62	51	50	55	68	83	87	88	86	85	90	89	89	94	90
10	Q	96	104	110	113	113	115	117	115	103	87	64	48	44	50	63	73	80	83	88	93	85	83	85	87	87
11		93	97	104	107	113	113	111	102	91	74	48	38	38	47	60	71	79	80	77	75	86	81	83	95	82
12	D	102	101	111	119	120	122	124	105	88	79	73	63	63	62	68	67	56	52	158	193	206	221	259	207	117
13	D	164	151	94	69	86	58	50	66	77	74	69	73	92	75	84	87	83	90	114	91	86		89	97	(88)
14		104	111	106	108	113	113	107	108	103	88	71	55	53	56	64	71	79	81	75	77	85	85	85	88	87
15		102	104	104	118	103	101	101	104	86	71	62	52	62	55	68		72	76	80		86	89	94	(85)	
16	D	97	100	104	107	112	115	120	116	103	91	89	71	66	69	63	64	76	73	72	85	86	79	80	68	88
17		90	77	71	97	100	125	124	118	106	95	82	71	65	69	75	79	90	82	87	98	89	90	88	87	90
18		91	97	100	102	101	109	116	111	110	98	85	75	68	67	78	79	80	86	87	95	103	96	94	97	93
19		100	98	94	96	97	100	104	108	102	89	82	72	66	68	70	76	87	82	80	85	87	83	84	91	88
20	Q	94	99	101	101	103	104	106	99	87	72	57	50	57	64	73	81	88	89	86	84	84	84	87	87	85
21	Q	90	93	97	105	109	113	115	109	101	91	80	70	70	71	76	83	86	86	85	84	83	84	86	86	90
22		92	98	109	111	110	105	105	104	94	79	61	54	53	57	62	68	76	77	78	86	82	88	91	118	86
23	D	109	131	121	84	84	71	74	124	54	67	51	27	12	36	41	56	74	71	105	107	111	112	108	113	81
24		110	93	109	131	123	123	123	119	106	93	77	73	63	65	77	85	91	94	92	88	89	88	84	81	95
25		88	101	102	95	109	107	124	120	106	89	74	67	65	64	69	76	80	76	92	85	99	108	101	79	91
26		85	105	108	97	102	106	117	117	108	95	82	70	70	69	79	86	85	87	88	83	82	81	81	90	91
27	Q	95	100	100	105	110	110	112	110	102	91	77	66	61	64	69	71	72	75	77	78	96	92	91	91	88
28	Q	94	97	104	107	105	111	115	113	103	91	79	71	65	70	77	80	81	82	85	83	79	81	80	79	89
29		89	98	105	109	112	111	112	113	106	92	73	59	60	66	76	83	80	82	81	79	80	82	86	90	88
30		86	92	99	113	113	116	117	114	105	95	83	75	70	66	68	74	75	80	77	79	84	86	90	96	90
All Quiet Dist.		99	101	103	105	109	109	111	109	97	84	70	60	59	62	70	77	80	82	88	91	93	92	94	96	89
		94	98	102	106	108	111	113	109	99	86	71	61	59	64	72	78	81	83	84	84	85	85	86	86	88
		113	116	104	97	103	96	96	104	84	78	68	56	53	55	59	66	68	72	105	120	120	128	125	116	

Nurmijärvi Finland

July 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		15	11	9	15	11	6	-10	-22	-29	-26	-17	-12	3	7	22	9	49	32	53	36	5	10	-9	-11	7
2		-10	-19	-2	2	-7	-15	-19	-16	-30	-32	-31	-21	-9	-2	0	-4	4	19	27	25	6	3	11	0	-5
3		-8	-13	-19	-6	-8	-9	-18	-31	-52	-55	-42	-19	-4	15	-3	-6	-6	1	3	8	8	3	2	-9	-11
4		0	-2	0	-3	-7	-8	-11	-23	-26	-27	-22	-17	-10	-4	1	0	5	8	14	15	9	7	7	1	-4
5	Q	-3	1	2	-1	-11	-18	-24	-33	-37	-40	-28	-12	-1	2	-1	-3	2	8	13	14	12	8	7	5	-6
6	Q	1	3	4	5	7	0	-14	-22	-29	-30	-29	-22	-8	11	14	19	20	15	8	11	10	7	6	7	0
7		4	7	8	0	-4	-11	-16	-16	-19	-16	-17	-12	-1	-8	-1	27	9	15	15	16	10	1	-1	-7	-1
8	Q	-7	-7	-1	10	7	1	-7	-13	-19	-25	-24	-16	2	-1	6	9	12	17	22	23	17	18	9	1	1
9	D	3	6	15	18	18	15	-1	-17	-21	-40	-39	-26	-10	25	83	109	55	22	10	6	-31	-33	-22	-43	4
10	D	-50	-6	2	-30	3	11	-20	-23	0	-14	-18	33	45	91	285	295	161	69	32	75	-142	-290	-91	-59	9
11		-51	-36	-15	-22	-31	-32	-67	-81	-44	-42	-39	-31	-13	8	1	13	3	11	4	-24	-24	-22	-23	-28	-24
12	D	-27	-25	-20	-134	-143	-89	-41	-25	-34	-33	-32	-43	-28	91	219	39	8	-6	-21	-15	-15	-14	-11	-9	-17
13	D	-13	-9	-6	-10	-13	-14	-14	-27	-62	-87	-39	-66	1	40	14	38	28	40	-1	-15	-14	-5	-10	-22	-11
14		-14	-10	-10	-15	-19	-20	-18	-27	-39	-46	-46	-39	-9	14	5	10	-2	-8	-12	-11	-9	-5	-9	-13	-15
15		-11	-11	-6	-1	-1	-10	-18	-24	-31	-33	-34	-31	-14	-5	-7	4	1	5	9	4	2	-6	-13	-11	-10
16		-10	-17	3	8	8	10	-2	-12	-14	-22	-28	-30	-26	-16	-5	11	20	21	13	14	5	1	-2	-3	-3
17		1	6	17	13	13	10	-5	-14	-26	-56	-82	-70	-11	-1	29	-18	-12	8	2	6	5	9	5	-39	-9
18		-50	-36	-21	-82	-68	-51	-63	-61	-53	-55	-46	-39	-33	-9	-8	-2	1	8	6	-3	-14	-35	-19	-7	-31
19		-12	-20	-21	1	1	-9	-22	-31	-28	-26	-25	-18	-8	-11	-12	-15	-6	-1	6	7	9	-7	-2	-19	-11
20		-13	2	-2	-3	-10	-19	-28	-29	-28	-28	-25	11	26	-43	-9	16	2	5	10	9	-5	0	-1	-20	-8
21		-78	-52	-55	-73	-17	-11	-33	-39	-51	-38	-28	-22	-13	-2	3	-2	21	11	3	5	-7	-9	-12	-21	-22
22		-16	-24	-8	-7	-21	-31	-29	-40	-47	-38	-30	-27	-10	-8	-11	-19	2	25	7	6	4	-4	-6	-6	-14
23		-14	-9	-8	-10	-20	-23	-28	-32	-31	-30	-29	-31	-27	-22	-12	-2	11	0	0	-1	0	-2	-6	-4	-14
24	Q	-6	-5	-5	-5	-8	-14	-20	-27	-34	-35	-32	-27	-24	-11	2	20	17	20	10	5	2	1	-2	-3	-8
25	Q	-3	4	-7	-6	-6	-7	-10	-17	-20	-21	-22	-26	-23	-12	-3	1	3	10	15	14	11	9	3	5	-5
26		3	0	1	0	-2	-8	-15	-19	-21	-24	-21	-11	-6	-1	1	10	15	10	15	20	14	15	14	12	0
27		8	3	7	3	0	-9	-24	-25	-28	-27	-26	-30	-15	4	-8	9	11	12	9	16	17	-4	6	-12	-4
28		-8	-6	-5	-10	-86	-8	-13	-23	-31	-36	-45	-26	17	28	-2	7	13	-1	6	-1	-10	-15	-8	-15	-12
29		-22	3	-8	-10	-13	-11	-21	-24	-27	-27	-11	-4	-26	-18	-1	20	10	40	6	0	-1	2	-3	-8	-7
30		-15	-34	-35	-8	-27	-35	-30	-31	-37	-31	-26	-20	-11	4	8	-6	-10	-4	9	0	-1	0	1	-7	-15
31		-3	3	6	-4	-15	-16	-16	-13	-12	-24	-23	-16	-8	26	-14	-2	0	2	2	3	-1	3	4	-12	-6
All		-13	-10	-6	-12	-15	-14	-21	-27	-31	-34	-31	-23	-8	6	19	19	14	13	10	4	-4	-12	6	-20	-8
Quiet		-4	-2	-1	1	-2	-8	-15	-22	-28	-30	-27	-21	-11	-2	4	9	11	14	14	13	10	8	5	3	-3
Dist.		-19	-8	-3	-33	-44	-17	-18	-23	-29	-42	-35	-26	5	55	120	98	53	25	5	-20	-42	-71	-29	-30	-5

July 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		95	87	95	112	120	121	123	114	104	91	72	62	54	57	54	58	52	58	57	71	91	99	100	99	85	
2		113	105	107	120	122	128	124	122	112	98	83	66	60	60	69	81	89	91	107	93	82	94	104	104	97	
3		107	110	103	113	117	113	117	117	105	88	75	63	55	59	71	78	81	81	82	82	83	86	81	81	90	
4		89	100	99	109	111	115	118	107	95	77	67	59	58	62	70	78	84	82	82	84	86	88	89	94	88	
5	Q	100	95	101	109	117	116	117	109	95	77	60	47	47	60	70	79	84	84	83	83	84	87	91	89	87	
6	Q	89	97	103	104	105	109	117	121	113	94	74	54	44	47	57	66	78	85	81	79	79	82	89	95	86	
7		93	96	99	104	105	110	111	103	91	75	61	53	45	42	54	65	84	82	82	80	80	76	89	94	82	
8	Q	101	106	118	115	113	115	117	114	101	87	70	61	52	48	53	61	73	79	80	81	83	90	95	97	88	
9	D	102	107	111	112	116	116	124	127	108	82	60	38	30	28	30	55	68	79	94	122	104	96	126	110	89	
10	D	119	131	110	69	69	93	113	85	100	92	78	65	73	76	58	21	59	92	88	127	160	180	141	115	96	
11		137	137	107	93	109	113	101	90	91	83	72	65	51	65	66	71	82	81	82	145	102	96	106	110	94	
12	D	107	108	70	67	32	36	81	104	109	104	100	122	87	90	135	94	87	94	88	83	84	87	90	93	90	
13	D	99	103	104	112	111	110	112	99	105	88	72	48	32	61	56	66	77	121	91	79	79	91	82	83	87	
14		89	102	108	101	92	109	119	115	104	95	79	62	63	68	81	87	92	91	90	89	88	86	91	97	92	
15		99	103	105	111	117	116	111	107	103	96	85	74	64	67	72	80	87	90	87	97	94	90	89	95	93	
16		89	87	104	94	103	107	101	97	94	87	77	70	71	73	75	78	84	88	81	82	87	91	94	99	88	
17		102	103	114	116	114	114	115	102	99	107	65	63	68	61	55	62	75	68	88	93	90	88	87	107	90	
18		143	143	137	95	94	84	110	115	91	88	90	88	79	83	73	74	80	83	87	95	121	123	111	107	100	
19		103	97	101	116	123	118	117	109	102	91	80	72	65	65	72	83	87	90	88	88	90	109	120	110	96	
20		121	113	108	110	116	113	112	110	104	89	72	52	32	47	51	53	78	76	88	121	95	87	89	93	89	
21		118	155	122	89	82	112	98	108	94	81	79	69	61	61	72	80	83	93	90	105	106	95	123	104	95	
22		103	87	105	118	123	118	121	114	102	87	69	58	58	66	75	80	82	113	87	95	76	85	91	90	92	
23		88	99	105	111	111	112	113	107	101	89	79	71	67	67	71	78	93	87	88	87	86	86	89	83	90	
24	Q	94	98	103	107	108	110	112	112	105	95	86	77	74	75	75	75	76	76	84	92	85	86	91	95	91	
25	Q	97	101	106	116	122	123	125	119	108	97	87	81	76	78	79	79	78	79	81	82	82	87	91	89	94	
26		101	100	105	107	109	105	100	94	89	80	70	62	56	60	63	67	72	75	74	73	78	80	85	91	83	
27		93	104	119	122	121	119	107	100	98	86	74	68	72	72	83	85	89	89	91	76	84	137	111	106	96	
28	D	115	108	109	120	76	75	109	105	109	97	79	72	52	54	77	64	72	82	106	80	82	111	102	116	91	
29		122	122	121	121	119	113	110	105	104	93	69	66	60	55	57	69	74	66	84	85	81	93	106	88	91	
30		110	92	76	110	120	105	103	95	88	85	74	65	65	65	78	85	87	85	85	86	88	91	92	87	88	
31		93	100	107	114	114	103	96	97	95	87	79	68	61	65	75	79	85	87	87	85	89	89	93	131	91	
All		104	106	106	107	108	111	107	108	111	107	101	89	75	66	59	62	69	72	85	86	91	90	96	98	98	91
Quiet		96	100	106	110	113	114	118	115	104	90	75	64	59	61	67	72	78	80	82	83	83	86	91	93	89	
Dist.		108	111	101	96	81	86	108	104	106	92	78	69	55	62	71	60	73	93	93	98	102	113	108	103	91	

Nurmijärvi Finland

August 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-28	-41	-15	-3	-7	-10	-13	-26	-40	-59	-21	-24	-1	5	19	17	2	15	11	5	5	1	-4	-9	-9
2		-17	-8	-11	-20	-15	-9	-11	-19	-19	-11	-26	-31	-13	-20	5	9	7	12	9	2	7	4	3	1	-7
3		3	-3	-6	-21	-25	-13	-6	-17	-25	-25	-23	-15	0	-6	1	12	20	26	2	7	-7	-6	-3	-4	-7
4		-14	-19	-11	6	3	-1	-14	-39	-37	-40	-43	-29	-15	-8	6	16	4	-9	-9	-8	-5	-2	3	2	-11
5		-2	-2	-2	-3	-6	-13	-21	-29	-35	-32	-21	-10	-15	-20	-5	5	32	27	17	7	1	2	8	2	-5
6	D	-8	-22	-20	-29	-28	-33	-21	-32	-47	-55	-36	-15	-38	-17	-1	35	36	-8	4	-20	-27	-7	-20	-23	-18
7		-13	-8	-10	-29	-28	-31	-54	-45	-61	-58	-56	-23	-19	-7	6	-7	9	11	15	-1	-11	-10	-5	-13	-19
8		-8	-11	-12	-5	-5	-14	-19	-31	-36	-40	-36	-28	-15	6	0	-12	-4	-3	0	1	6	2	-1	-1	-11
9		0	-10	-7	-12	-4	-6	-14	-21	-27	-34	-39	-29	-24	-15	3	7	0	14	2	-1	-1	-12	5	-14	-10
10		-10	-14	-15	-3	-3	-7	-12	-28	-64	-54	-38	-29	-42	6	5	-31	-19	-15	-10	-6	-7	-9	-10	-10	-18
11	Q	-11	-11	-10	-11	-13	-16	-22	-32	-38	-40	-42	-31	-20	-14	-4	-2	0	0	0	1	2	-2	-4	-7	-14
12	Q	-9	-11	-10	-8	-8	-8	-11	-20	-31	-34	-33	-25	-15	-6	4	11	6	4	5	4	1	4	13	5	-7
13	D	1	7	6	17	12	12	8	-3	-9	-15	-16	-8	0	4	5	9	7	7	7	15	3	-3	-35	-3	1
14		-12	-10	-38	-25	0	0	-6	-17	-25	-35	-31	-16	-9	-8	-1	-1	-3	2	0	1	5	-2	2	-7	-10
15		-8	-5	-5	-8	-6	-1	-2	-9	-19	-24	-20	-11	-7	-11	0	4	16	8	16	10	13	15	10	2	-2
16		6	-5	7	-1	-22	1	5	-7	-24	-45	-39	-38	-7	-21	-12	-2	1	3	4	9	4	-3	-3	2	-8
17		-15	-2	-11	-14	-19	-25	-23	-21	-27	-33	-24	-21	-6	-12	-7	11	-8	1	1	3	13	10	1	15	-10
18		-26	-7	-5	-6	-20	-27	-27	-26	-34	-40	-32	-27	-8	-2	4	6	13	11	5	-4	2	5	-2	-6	-11
19		-10	-13	-4	-3	-7	-18	-26	-28	-28	-33	-27	-11	0	2	6	5	0	-1	1	4	15	4	-3	-4	-7
20	Q	-4	-3	-4	-2	-9	-18	-29	-38	-48	-48	-35	-20	-6	5	7	3	3	2	5	5	-1	-1	1	1	-10
21		2	3	3	0	-4	-9	-13	-19	-23	-29	-31	-24	-3	-3	11	15	15	8	11	6	4	8	7	-7	-3
22		-12	-11	2	7	-1	2	-5	-22	-37	-38	-29	-27	-11	-6	3	-6	2	4	5	4	3	4	4	-8	-8
23		-2	0	1	-2	-4	-12	-18	-29	-38	-30	-24	-22	-10	-17	-8	5	-14	-10	4	1	6	4	6	-5	-9
24	D	0	4	3	-1	4	-3	-23	-44	-40	-20	33	213	189	140	-26	139	-17	-17	23	-135	-69	-78	-66	-45	7
25	D	-60	-104	-92	-47	-57	-86	-92	-90	-78	-73	-63	-42	-26	-6	-18	54	1	-11	-18	-32	-33	-36	-25	-30	-44
26		-38	-45	-53	-35	-32	-44	-52	-57	-50	-49	-51	-44	-32	-24	-25	-23	-25	-21	-14	-14	-19	-21	-17	-18	-33
27		-28	-41	-29	-20	-15	-18	-24	-31	-49	-48	-44	-31	-27	-23	-18	-16	-19	-14	-12	-12	-15	-15	-15	-15	-24
28	Q	-14	-19	-21	-18	-20	-25	-31	-36	-41	-40	-34	-27	-13	-5	-4	-8	-7	-11	-5	-5	-11	-19	-19	-13	-19
29		-4	-27	-20	-17	-19	-34	-34	-32	-31	-27	-25	-23	-17	-14	-12	-16	-15	-12	-10	-9	-9	-9	-10	-18	-18
30	Q	-12	-13	-13	-14	-16	-17	-21	-25	-30	-34	-36	-30	-19	-14	-10	-11	-11	-11	-8	7	0	-6	-8	-5	-15
31	D	-4	-10	-12	-12	-13	-15	-21	-37	-40	-38	-21	-26	19	64	125	316	293	75	-14	-89	-115	-311	-106	-44	-1
All		-12	-15	-13	-11	-12	-16	-21	-29	-36	-38	-31	-17	-8	-2	1	18	10	2	2	-8	-8	-16	-9	-9	-12
Quiet		-10	-11	-12	-11	-13	-17	-23	-30	-38	-39	-36	-26	-14	-7	-1	-1	-2	-3	-1	2	-2	-5	-3	-4	-13
Dist.		-14	-25	-23	-15	-16	-25	-30	-41	-43	-40	-21	25	29	37	17	111	64	9	0	-52	-48	-87	-50	-29	-11

August 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		130	106	106	124	120	115	122	121	109	86	57	46	41	50	53	59	80	90	85	79	88	85	94	105	90
2		105	106	109	112	110	110	109	98	85	72	64	61	53	66	68	73	78	81	85	89	89	93	95	97	88
3		100	105	97	98	89	92	100	106	108	97	81	73	65	67	77	83	89	102	106	99	99	83	95	112	93
4		102	100	96	102	98	109	116	105	97	91	79	64	50	51	66	78	91	92	88	90	99	93	93	95	89
5		95	97	102	107	111	113	113	111	94	73	58	56	57	64	76	83	81	87	105	104	95	89	104	107	91
6	D	96	129	119	96	95	115	111	118	113	82	81	60	61	70	79	102	109	101	103	115	121	99	106	108	100
7		94	107	102	95	101	105	92	94	94	87	81	75	72	82	90	95	97	96	114	100	99	88	93	91	93
8		93	84	95	108	109	101	99	91	90	82	72	63	63	65	76	82	91	92	90	89	86	91	92	86	87
9		89	84	91	98	108	118	119	112	101	89	76	69	67	70	78	82	88	93	100	94	90	88	95	96	91
10		96	105	95	109	117	120	116	108	105	105	95	93	65	61	95	87	90	88	88	88	86	88	90	97	95
11	Q	96	96	101	108	110	111	112	109	100	86	74	69	71	76	78	83	84	86	86	88	88	92	98	96	91
12	Q	98	105	107	110	112	115	114	109	102	93	84	74	71	69	70	75	79	82	86	89	93	89	92	104	93
13	D	104	102	104	97	101	105	112	110	102	92	82	69	56	57	61	67	80	83	80	90	101	102	85	114	90
14		113	110	100	91	115	116	110	108	99	87	77	68	67	72	76	79	85	88	89	91	90	106	109	101	94
15		102	101	102	106	108	109	111	105	97	87	71	64	62	65	69	74	75	80	82	82	86	100	124	101	90
16		96	99	100	110	82	99	123	124	111	93	75	67	48	73	74	73	84	90	94	97	98	80	91	95	91
17		91	96	106	106	107	112	116	117	105	92	73	62	52	57	66	71	101	93	89	94	105	101	102	101	92
18		70	87	108	117	115	119	111	107	101	92	77	68	60	64	83	87	90	108	102	96	99	109	93	98	94
19		88	85	104	111	114	113	105	101	89	78	72	70	72	77	83	92	89	88	87	91	93	99	92	95	91
20	Q	98	100	100	109	112	117	118	113	100	82	66	56	61	73	82	87	89	88	91	97	91	91	92	94	92
21		93	91	98	105	109	112	111	104	94	78	60	49	50	56	61	68	81	100	116	97	103	117	109	90	90
22		87	88	88	92	96	124	127	117	101	80	61	47	46	55	72	79	89	92	89	90	94	93	90	81	87
23		92	98	103	106	110	111	109	103	98	84	65	56	59	64	81	94	105	98	106	89	83	87	89	86	91
24	D	87	109	100	103	111	113	118	100	50	104	295	76	16	12	36	26	74	56	59	97	140	114	140	163	96
25	D	139	130	114	126	141	134	113	107	102	86	74	69	67	71	71	111	101	101	107	99	87	87	83	96	101
26		94	94	93	104	127	122	112	100	104	97	82	72	72	79	89	98	100	99	100	99	103	97	93	104	97
27		113	93	95	118	119	126	129	124	110	99	83	71	70	76	86	92	92	95	96	98	97	98	99	102	99
28	Q	104	115	121	127	123	119	119	115	107	95	79	73	72	74	79	86	89	90	89	90	100	118	110	108	100
29		124	123	108	131	123	119	100	97	98	92	77	66	66	71	78	85	89	89	94	96	98	100	102	104	97
30	Q	103	105	106	109	112	111	109	105	98	90	76	66	63	66	74	83	88	89	90	88	94	108	113	107	94
31	D	105	107	112	117	115	121	116	100	90	72	53	48	38	36	48	-5	51	69	185	130	112	119	134	125	92
All		100	102	103	108	110	114	113	108	98	88	61	65	59	64	73	78	87	96	95	97	97	100	102	93	
Quiet		100	104	107	112	114	114	114	110	101	89	76	68	67	72	76	83	86	87	88	90	93	100	101	102	94
Dist.		106	115	110	108	112	117	114	107	91	87	117	65	48	49	59	60	83	82	107	106	112	104	110	121	95

Nurmijärvi Finland

September 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-37	-55	-58	-46	-60	-43	-41	-46	-49	-50	-50	-42	-53	-40	-22	-18	-24	-21	-18	-15	-20	-12	-18	-15	-35
2	D	-18	-25	-30	-25	-40	-39	-25	-31	-54	-51	-41	-33	-33	-35	-9	-7	28	4	-57	-51	1	-9	-13	-17	-25
3		-51	-104	-103	-44	-60	-60	-30	-42	-50	-99	-63	-41	-10	36	0	-30	-30	-29	-24	-18	-17	-16	-21	-28	-39
4		-17	-28	-48	-39	-35	-40	-63	-49	-57	-85	-56	-11	-21	-12	-13	-4	-21	-19	-23	-22	-25	-17	-19	-25	-31
5		-26	-46	-20	-19	-26	-32	-32	-36	-48	-53	-41	-26	-18	-19	-12	-10	-24	-20	-13	-13	-2	-15	-14	-13	-24
6		-10	-31	-13	-6	-14	-17	-24	-37	-44	-40	-48	-47	-25	-2	-16	-11	-25	-12	-13	-12	-13	-11	-10	-11	-21
7		-9	-13	-26	-21	-6	-10	-15	-23	-27	-27	-31	-29	-20	-7	-3	-6	-10	-10	-4	-5	-5	-4	-4	-4	-13
8	Q	-7	-6	-15	-21	-18	-19	-20	-26	-28	-32	-28	-19	-13	-3	-3	-4	-11	-3	-7	-8	-3	-1	0	-5	-12
9		-11	-8	-9	-13	-15	-17	-17	-22	-26	-26	-25	-26	-13	-1	61	21	28	-6	-13	5	5	-9	-18	-27	-8
10		-33	-17	-12	-14	-16	-19	-42	-44	-41	-33	-29	-31	-25	1	20	34	60	24	2	-26	-44	-77	-61	-79	-21
11	D	-68	-72	-31	-122	-77	-70	-165	-92	-99	-83	-59	36	80	199	69	43	-38	13	-49	-69	-97	-102	-62	-94	-42
12	D	-45	-67	-80	-64	-88	-62	-106	-121	-90	-49	-63	-42	-43	-36	12	18	2	-8	-4	-16	-72	-55	-70	44	-46
13	D	-71	-65	-84	-51	-60	-60	-61	-79	-84	-75	-27	-11	26	96	-17	-46	-43	-36	-30	-15	-20	-27	-24	-29	-37
14		-35	-33	-31	-32	-39	-58	-65	-70	-69	-60	-59	-48	-46	-12	-25	-23	-24	-17	-24	-10	-23	-26	-28	-33	-37
15	D	-54	-32	-31	-30	-30	-26	-28	-38	-54	-53	-26	-21	14	45	50	129	-20	-17	-20	-28	-69	-57	-47	-36	-20
16		-40	-46	-64	-40	-38	-41	-49	-57	-57	-47	-45	-39	-19	-1	-22	-16	-29	-28	-8	-28	-39	-27	-22	-22	-34
17		-21	-23	-24	-26	-30	-23	-28	-40	-45	-42	-41	-16	-5	-16	-13	8	-24	-29	-20	-25	-26	-23	-36	-28	-25
18		-22	-21	-25	-29	-24	-26	-29	-45	-59	-57	-42	-32	-37	-18	-20	-26	-24	-17	-14	-21	-15	-14	-18	-19	-27
19		-20	-23	-20	-18	-19	-24	-31	-42	-48	-51	-44	-33	-21	-19	-18	-20	-15	-22	-21	-12	-17	-18	-16	-19	-25
20	Q	-18	-17	-18	-16	-19	-28	-35	-42	-53	-49	-47	-35	-18	-17	-12	-12	-19	-16	-14	-17	-19	-17	-16	-20	-24
21	Q	-17	-16	-12	-12	-11	-14	-22	-35	-47	-49	-45	-31	-21	-18	-18	-17	-13	-15	-16	-14	-14	-14	-14	-11	-21
22		-12	-12	-14	-17	-12	-15	-19	-34	-41	-43	-30	-21	-19	-10	-13	-25	-21	-18	-23	-11	-10	-10	-11	-10	-20
23		-13	-11	-14	-15	-20	-23	-20	-32	-36	-38	-33	-27	-20	-20	-16	-15	-14	-11	-12	-10	-15	-17	-11	-9	-19
24	Q	-7	-16	-15	-12	-9	-12	-17	-22	-27	-30	-27	-22	-21	-13	-12	-11	-8	-8	-7	-7	-4	-5	-8	-8	-14
25	Q	-9	-9	-10	-10	-10	-12	-16	-20	-27	-32	-30	-18	-24	-24	-10	-8	-5	-6	-4	-1	-2	-2	-2	-5	-12
26		-4	-24	-26	-13	-5	-5	-12	-14	-27	-39	-41	-42	-47	-39	-15	-16	-16	-13	-15	-21	-11	-12	-14	-5	-20
27		-7	-14	-22	-12	-26	-20	-16	-23	-42	-49	-52	-46	-27	-24	-21	-22	-16	-9	-3	2	-4	7	4	(-19)	
28		-9	-22	-10	0	3	-14	-19	-28	-34	-38	-39	-24	-32	-25	-29	-25	-23	-9	-9	-8	-9	-7	-7	-8	-18
29		-10	-17	-8	-8	1	-4	-10	-14	-20	-27	-26	-24	-22	-30	-26	-18	-20	-24	-18	-12	-8	-7	-8	-7	-15
30		-5	-7	-8	-6	-5	-5	-11	-15	-18	-26	-26	-23	-12	-13	-28	-26	-13	-6	-5	-4	-8	-3	-4	-7	-12
All Quiet		-24	-29	-29	-26	-27	-28	-36	-40	-47	-48	-41	-28	-18	-3	-6	-5	-14	-13	-16	-17	-20	-21	-20	-18	-24
Dist.		-51	-52	-51	-58	-59	-51	-77	-72	-76	-62	-43	-14	9	54	21	27	-14	-9	-32	-36	-51	-50	-43	-26	-34

September 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1		108	108	108	120	110	106	103	99	95	89	80	75	68	78	89	95	96	94	93	96	102	113	100	98	97	
2	D	102	95	95	104	100	92	98	98	103	85	67	64	66	71	79	81	93	154	116	102	93	100	99	92	94	
3		93	38	82	85	97	75	109	114	101	90	77	75	81	86	105	90	94	95	95	97	100	100	83	73	89	
4		101	109	109	76	72	78	95	95	105	85	69	92	88	96	104	122	113	135	127	106	107	80	106	97	99	
5		96	80	108	117	117	111	108	103	93	82	69	68	68	84	100	104	124	109	99	100	107	95	96	95	97	
6		107	115	123	122	122	120	117	114	103	87	72	65	64	73	82	98	104	102	102	99	98	93	96	90	99	
7		94	101	87	82	102	107	99	97	88	81	72	77	81	80	87	94	95	97	98	95	96	98	99	97	92	
8	Q	93	89	109	115	116	117	113	104	94	90	83	82	83	83	87	92	104	99	95	102	111	96	98	96	98	
9		100	102	103	101	106	113	115	108	98	86	67	67	67	69	86	62	70	88	77	77	103	141	129	119	94	
10		114	111	114	114	121	123	128	105	101	88	74	64	68	64	57	63	138	125	95	110	116	154	131	89	103	
11	D	93	71	147	148	171	186	130	98	121	127	120	92	105	117	110	142	113	132	98	128	129	131	134	117	123	
12	D	124	128	114	115	95	119	101	108	109	113	101	78	75	76	70	137	112	100	120	205	169	145	144	136	116	
13	D	153	135	97	89	82	81	96	90	95	82	119	112	91	115	116	103	104	103	107	101	98	103	105	102	103	
14		115	122	126	115	113	102	97	97	79	90	79	77	90	82	109	99	96	107	88	95	104	109	111	113	101	
15	D	113	105	116	111	101	101	99	99	92	75	62	65	57	51	92	92	92	82	93	101	96	149	134	117	96	
16		107	108	96	105	116	116	100	98	97	99	88	83	89	113	108	113	100	103	103	118	125	122	94	102	105	
17		103	101	100	97	96	107	111	110	101	89	82	76	81	96	99	139	112	107	109	105	103	99	98	107	101	
18		101	96	98	93	101	104	107	111	93	81	83	80	80	90	99	102	103	105	119	108	106	110	101	98	99	
19		97	85	102	110	111	112	109	106	98	88	79	78	80	86	95	103	111	103	113	114	107	105	102	98	100	
20	Q	100	96	97	101	108	110	110	98	98	86	75	73	81	92	101	104	102	101	102	108	98	91	91	95	97	
21	Q	97	96	101	104	107	111	111	107	97	87	76	73	77	83	90	97	97	94	95	97	97	97	97	95	95	
22		90	90	95	97	105	113	115	109	97	90	81	73	69	73	82	93	86	87	91	98	96	96	98	97	93	
23		100	94	102	107	97	95	100	107	97	93	85	82	80	82	83	88	92	95	98	105	117	109	102	95	96	
24	Q	104	113	113	112	111	108	108	107	104	98	89	79	82	78	81	86	90	91	92	93	94	96	100	100	97	
25	Q	101	101	103	103	107	111	114	113	105	96	81	62	55	65	76	79	81	84	89	92	92	96	97	96	99	92
26		101	92	83	98	112	117	115	114	109	96	81	69	56	64	67	73	82	87	107	113	128	167	129	105	99	
27		104	103	85	86	100	90	105	110	107	102	87	81	69	76	85	91	98	103	101	98	100	96	112	(95)		
28		105	102	99	103	105	105	96	100	94	83	81	74	80	74	91	97	103	124	105	97	96	100	99	105	97	
29		105	94	95	99	99	105	109	107	100	93	87	83	81	78	85	95	100	115	99	97	93	96	98	99	96	
30		100	102	100	98	97	102	105	102	102	95	91	84	77	74	71	93	84	85	86	90	92	108	127	109	97	95
All Quiet Dist.		104	99	104	104	106	108	107	104	99	91	82	76	76	81	90	97	99	103	101	105	106	111	106	101	98	
		99	99	105	107	110	111	111	106	100	91	81	74	76	80	87	92	95	94	94	98	99	96	96	97	96	
		117	107	114	113	110	116	105	98	104	96	94	82	79	86	94	111	103	114	107	127	117	126	123	113	106	

Nurmijärvi Finland

October 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-5	-7	-7	-7	-7	-8	-14	-35	-42	-44	-41	-42	-36	-32	-20	-19	-13	-12	-12	11	-16	-14	-10	-10	-18
2		-18	-33	-17	3	-16	-5	-15	-25	-43	-40	-33	-24	-24	-19	-21	-33	-23	-9	-14	-10	-10	-7	-17	-5	-19
3	D	-16	-14	-11	-9	-17	-17	-18	-27	-30	-27	-33	-23	-20	-19	-15	-13	-9	-9	-10	-6	-5	-8	-8	-16	
4		-8	-13	-13	-14	-11	-11	-18	-25	-36	-37	-28	-27	-30		-20	-17	-12	-10	-9	-9	-6	-10	-9	-9	(-16)
5		-9	-10	-9	-7	-4	-8	-15	-28	-42	-42	-41	-25	-18	-18	-14	-13	-10	-9	-9	-8	-2	-8	-4	-4	-15
6		-8	-12	-8	-8	-2	0	-6	-18	-33	-40	-41	-33	-17	-16	-10	-9	-10	-13	-18	-11	-4	-5	-5	-7	-14
7		-10	-8	-1	-1	5	10	8	-3	-13	-30	-37	-28	-14	-7	-15	-9	2	-6	-8	-17	-12	-33	-59	-40	-14
8	D	-50	-31	-13	-11	-13	-17	-28	-47	-37	-51	-61	-40	-30	-26	-21	-26	-16	-10	-15	16	-22	-18	-4	-15	-24
9		-14	-21	-19	-14	-13	-13	-15	-20	-24	-26	-29	-32	-23	-17	-18	-14	-12	-11	-8	11	-17	-13	-8	-13	-16
10		-9	-9	-14	-13	-7	-10	-27	-24	-30	-45	-37	-32	-17	-14	-13	-10	-10	-10	-9	-13	-10	-9	-2	-11	-16
11		-11	-21	-13	-15	-13	-15	-19	-27	-32	-34	-33	-24	-20	-19	-19	-12	-16	-16	-10	-5	-14	-6	-10	-13	-17
12	Q	-12	-12	-11	-9	-8	-7	-9	-18	-27	-34	-34	-28	-21	-16	-10	-9	-8	-7	-6	-6	-7	-3	-7	-7	-13
13		-7	-8	-8	-5	-3	-2	-9	-22	-32	-37	-38	-31	-24	-15	-10	-8	-9	-11	-7	-10	-13	-12	-8	-13	-14
14	Q	-13	-12	-10	-9	-1	-1	-6	-21	-35	-45	-45	-35	-25	-14	-9	-7	-4	-4	-4	-4	-3	-3	-3	-4	-13
15	Q	-5	-5	-2	0	2	2	-6	-17	-30	-37	-34	-22	-12	-7	-7	-6	-6	-5	-3	-2	-2	-1	-2	-1	-9
16		-2	-4	-5	-4	-4	0	-11	-26	-33	-38	-39	-31	-27	-25	-26	-35	-38	-27	-29	-22	-17	-11	-16	-23	-21
17	D	-24	-15	-20	-20	-6	-15	-32	-34	-40	-43	-34	-31	-28	-34	-31	-33	-33		-18	-16	-11	-12	-12	(-25)	
18		-13	-12	-12	-17	-7	-6	-15	-25	-32	-33	-30	-24	-29	-18	-12	-13	-20	-12	-9	-9	-9	-10	-8	-10	-16
19		-11	-7	-11	-4	-3	-4	-10	-23	-35	-39	-29	-23	-20	-24	-20	-24	-24	-20	-16	-11	-17	-16	-16	-18	
20	Q	-15	-12	-13	-11	-8	-6	-8	-18	-29	-34	-36	-26	-18	-12	-11	-13	-11	-8	-6	-7	-6	-5	-5	-6	-13
21		-8	-8	-7	-5	-4	-3	-6	-12	-21	-25	-23	-17	-9	-7	-6	-5	-3	-2	-1	0	2	7	8	6	-6
22		-7	-3	-15	-11	-7	2	-2	-11	-20	-26	-27	-24	-18	-12	-8	-7	-6	-3	-1	-3	-8	-4	-5	-3	-9
23	Q	-8	-7	-7	-3	-2	-1	-1	-5	-12	-19	-23	-20	-13	-7	-6	-7	-4	-4	-3	-4	-4	-5	-5	-6	-7
24		-4	-4	-5	-2	3	5	4	-2	-10	-18	-19	-16	-12	-10	-12	-20	-12	-1	-5	-5	-9	-3	0	5	-6
25	D	3	2	-12	39	10	14	-4	-25	-38	-46	-44	-39	-31	-23	-28	-28	-12	-39	-33	-39	-30	-59	-9	-11	-20
26		-16	-16	-14	-11	-7	-9	-14	-20	-39	-34	-33	-31	-23	-17	-16	-15	-11	-15	-8	-21	-15	-15	-11	-15	-18
27		-20	-16	-10	-9	-7	-8	-10	-17	-24	-27	-29	-17	-9	-6	-25	-23	-31	0	-18	-17	-13	-13	-12	-13	-15
28		-13	-11	-9	-8	-7	-5	-10	-22	-37	-46	-37	-27	-24	-19	-19	-19	-17	-13	-6	-5	-13	-9	-11	-7	-16
29		-10	-9	-7	-6	-3	-4	-11	-21	-30	-30	-25	-17	-10	-6	-4	-5	-12	-12	-16	-15	-9	-7	-8	-7	-12
30		-9	-8	-6	-2	2	2	0	-9	-21	-26	-23	-20	-9	-10	-11	-9	-11	-8	-11	-2	-8	-6	-11	-13	-10
31	D	-12	-12	-11	-2	5	6	5	-4	-9	-20	-17	-19	-22	-18	-24	-12	-11	-26	-56	-91	-64	-83	-38	-36	-24
All		-12	-11	-10	-6	-5	-4	-10	-20	-29	-35	-33	-27	-20	-16	-16	-15	-13	-11	-12	-11	-12	-13	-10	-10	-15
Quiet		-10	-9	-9	-6	-4	-3	-6	-16	-26	-34	-34	-26	-18	-11	-9	-8	-7	-6	-4	-5	-4	-3	-4	-5	-11
Dist.		-20	-18	-15	2	-4	-3	-15	-27	-33	-40	-38	-30	-27	-24	-25	-27	-19	-21	-29	-29	-28	-35	-16	-16	-22

October 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		100	107	116	109	102	99	99	100	84	79	76	76	77	89	104	111	102	98	100	120	104	111	90	111	98
2		124	79	75	108	109	102	102	102	105	92	84	82	79	90	97	99	105	109	91	93	97	99	107	96	97
3	D	114	107	110	106	105	104	102	106	100	97	87	86	87	93	95	94	95	97	98	99	95	103	102	99	
4		96	103	103	103	104	107	108	108	103	93	79	76	75		87	94	96	97	102	98	100	103	98	97	(97)
5		98	94	101	105	106	110	112	109	101	87	85	75	76	80	87	92	92	92	92	97	103	101	99	105	96
6		105	103	104	103	101	105	109	109	103	89	80	75	73	78	89	94	94	104	107	97	98	96	97	98	96
7		99	96	100	102	102	104	108	109	103	90	81	78	65	57	63	81	83	84	124	104	110	139	179	130	100
8	D	123	117	110	113	118	122	118	104	108	92	91	85	77	77	80	80	85	95	99	157	110	101	85	95	102
9		110	96	95	102	103	106	107	108	105	99	87	85	79	78	85	91	94	97	97	117	111	108	95	116	99
10		113	106	96	97	101	111	109	101	102	97	95	79	81	77	83	91	92	95	95	99	100	100	105	101	97
11		128	98	110	107	106	110	110	112	107	97	86	78	73	78	88	98	118	107	101	103	105	97	97	103	101
12	Q	101	100	100	102	103	105	109	112	110	102	90	82	78	83	89	92	93	95	97	97	98	101	99	95	97
13		97	99	98	100	101	104	110	111	108	95	85	76	77	86	93	94	96	102	116	125	122	109	106	103	101
14	Q	101	99	101	100	100	107	113	114	107	95	79	73	76	83	91	92	93	95	96	96	97	98	98	99	96
15	Q	99	98	97	97	98	101	107	111	109	98	83	73	75	83	91	92	93	94	95	95	96	97	97	97	95
16		97	98	99	97	99	104	108	108	108	93	78	71	66	66	76	83	93	106	125	117	111	105	108	155	99
17	D	116	93	84	71	60	95	93	95	91	85	82	70	77	79	91	114	100	100	100	99	107	106	104	100	99
18		100	100	100	92	94	102	103	103	101	96	88	80	80	88	94	99	107	96	98	105	118	107	103	100	98
19		100	97	100	99	99	97	98	95	90	82	74	71	72	86	100	99	94	96	103	103	111	114	111	109	96
20	Q	88	98	102	102	105	106	108	107	106	97	88	80	81	87	93	95	100	96	97	98	99	100	98	101	97
21		100	99	99	99	101	103	107	109	106	99	89	82	81	86	91	92	92	92	93	94	95	94	95	96	95
22		108	125	118	108	100	102	104	107	106	99	93	87	85	86	89	90	90	92	92	95	104	100	103	111	100
23	Q	107	104	102	101	101	103	107	111	110	102	95	87	81	83	87	90	89	93	95	96	98	99	101	102	98
24		100	99	98	96	98	100	102	105	106	99	93	83	80	80	76	75	89	94	98	125	108	100	97	94	96
25	D	94	96	75	57	104	94	98	98	96	85	79	75	71	75	82	83	146	114	130	134	142	148	113	116	100
26		108	103	95	96	93	94	100	107	113	109	96	88	87	90	95	102	98	130	136	119	116	95	97	104	103
27		86	90	97	102	100	103	107	109	105	95	91	83	82	89	102	99	98	136	113	106	104	102	100	98	100
28		99	99	98	99	100	100	103	104	99	91	82	86	93	96	96	93	96	104	108	116	109	105	96	95	98

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November 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1		-48	-27	-26	-21	-22	-18	-27	-32	-41	-42	-41	-39	-36	-32	-32	-26	-36	-43	-46	-40	-30	-28	-21	-20	-32
2		-20	-18	-20	-21	-15	-12	-9	-14	-20	-27	-27	-24	-17	-13	-12	-9	-7	-5	2	-1	-7	-28	-28	-36	-16
3	D	-20	-22	-19	-14	-25	-9	0	-10	-19	-18	-14	-31	-32	-21	-23	-27	-27	-22	-42	-6	-17	-25	-27	-17	-20
4	D	-22	-37	-20	-17	-14	-20	-6	-9	-19	-19	-23	-22	-31	-21	-22	-20	-14	-18	0	-14	-22	-14	-10	-20	-18
5		-20	-22	-22	-28	-19	-17	-34	-31	-25	-25	-26	-24	-21	-15	-22	-25	-14	-13	-12	-11	-7	-12	-24	-22	-20
6	D	-20	-38	5	-11	-12	-14	-18	-24	-30	-38	-32	-19	-13	-14	-16	-21	-25	-14	-15	-18	-10	-13	-10	-23	-18
7		-17	-5	-15	-14	-11	-12	-15	-23	-30	-24	-23	-19	-17	-15	-14	-11	-13	-10	-6	-7	-11	-4	-11	-15	-14
8	Q	-15	-16	-14	-11	-10	-10	-11	-18	-25	-24	-19	-7	-7	-7	-10	-10	-8	-9	-12	-11	-11	-10	-12	(-12)	-10
9		-16	-14	-7	-5	-4	-5	-9	-15	-20	-21	-22	-17	-10	-7	-6	-6	-9	-9	-9	-7	-8	-6	-6	-9	-10
10	Q	-10	-10	-9	-9	-6	-6	-9	-16	-19	-21	-20	-14	-9	-7	-8	-8	-7	-8	-12	-13	-10	-11	-11	-10	-11
11		-8	-9	-8	-11	-7	-5	-4	-8	-13	-16	-18	-17	-12	-12	-14	-20	-19	-24	-24	-16	-10	-10	-13	-12	-13
12		-7	-11	-7	-5	-12	-5	-5	-17	-24	-31	-31	-29	-37	-42	-24	-20	-30	-34	-32	-21	-11	-1	-16	-17	-20
13	D	-16	-15	-28	-38	-4	-1	-12	-23	-35	-39	-38	-42	-42	-30	-35	-49	-49	-31	-27	-25	-31	2	-19	-22	-27
14		-22	-27	-36	-8	-9	-8	-14	-19	-30	-39	-37	-26	-23	-28	-26	-22	-18	-18	-18	-22	-28	-27	-20	-21	-23
15		-18	-18	-17	-12	-11	-7	-9	-20	-29	-33	-23	-20	-20					-12	-12	-13	-11	-10	-8	-15	(-16)
16	Q	-16	-14	-12	-10	-10	-7	-10	-14	-20	-21	-21	-17	-9	-9	-8	-12	-10	-11	-9	-7	-9	-10	-12	-6	-12
17	Q	-10	-12	-9	-6	-5	-3	-6	-16	-15	-14	-13	-12	-11	-11	-10	-11	-10	-9	-8	-8	-8	-8	-8	-9	-10
18		-9	-6	-4	-3	-2	-2	-4	-10	-12	-15	-13	-9	-9	-6	-5	-10	-8	-6	-12	0	-2	-2	-2	-6	-7
19		-7	-7	-8	-6	-3	-3	-5	-10	-13	-13	-11	-2	5	5	6	-2	-29	-42	-16	-14	-15	-45	-28	-21	-12
20		-23	-23	-19	-15	-7	-8	-16	-20	-24	-25	-26	-19	-14	-14	-14	-14	-14	-26	-27	-19	-14	-10	-14	-9	-17
21		-15	-17	-15	-15	-10	-11	-15	-17	-21	-22	-19	-14	-17	-18	-19	-20	-19	-21	-20	-12	-7	-7	-8	-9	-15
22		-9	-9	-7	-4	-3	-4	-5	-10	-22	-17	-16	-17	-20	-27	-31	-32	-32	-27	-37	-31	-29	-28	-20	-20	-19
23		-17	-19	-13	-7	-11	-14	-9	-12	-27	-26	-24	-20	-28	-37	-33	-23	-24	-35	-32	-23	-21	-17	-18	-21	-21
24		-10	-17	-16	-13	-9	-8	-8	-13	-13	-18	-18	-29	-19	-30	-35	-41	-42	-34	-36	-40	-41	-34	-23	-24	-24
25		-22	-34	-15	-16	-16	-6	-15	-24	-40	-22	-25	-24	-25	-20	-19	-31	-16	-18	-17	-14	-13	-7	-17	-17	-20
26		-18	-17	-11	-10	-7	-3	-6	-14	-18	-22	-22	-26	-22	-17	-15	-16	-23	-24	-19	-15	-15	-15	-8	-9	-15
27	Q	-12	-11	-10	-8	-9	-5	-9	-12	-14	-15	-13	-9	-7	-7	-8	-7	-8	-11	-9	-9	-11	0	-6	-10	-9
28		-11	-9	-7	-8	-8	-5	-6	-6	-2	-5	-8	-2						-1	-3	-8	-10	-22	-12	(-8)	-10
29		-16	-13	-13	-12	-11	-11	-11	-10	-9	-13	-13	-11	-9	-9	-9	-7	-6	-5	-6	-6	-5	-9	13	13	(-8)
30	D	-9	-11	-10	-15	-11	-9	-6	-6	-7															(-9)	-10
All		-16	-17	-14	-12	-10	-8	-10	-16	-21	-23	-22	-20	-18	-17	-17	-18	-19	-19	-17	-15	-15	-14	-14	-15	-16
Quiet		-13	-12	-11	-9	-8	-6	-9	-15	-19	-19	-17	-13	-9	-8	-8	-9	-9	-9	-9	-10	-10	-8	-9	-9	-11
Dist.		-17	-25	-14	-19	-13	-11	-8	-14	-22	-28	-27	-28	-30	-21	-24	-29	-29	-21	-21	-16	-20	-13	-17	-20	-20

November 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean		
1		113	97	108	101	102	102	106	105	103	103	97	87	87	92	86	87	91	113	132	115	118	117	117	97	104		
2		100	109	110	104	103	103	104	108	106	100	92	91	88	90	91	92	90	90	91	90	132	154	134	112	104		
3	D	113	94	112	109	96	72	88	103	107	102	88	87	85	78	94	110	134	153	104	130	126	124	91	90	104		
4	D	118	113	97	104	102	80	96	91	99	101	80	82	87	89	79	100	105	95	170	121	114	109	97	104	101		
5		104	104	101	100	96	97	101	108	101	94	89	88	90	92	95	108	93	98	100	103	103	115	114	80	99		
6	D	104	90	105	106	106	106	105	104	93	88	90	88	90	91	92	93	102	148	124	106	114	110	96	116	103		
7		101	99	99	103	107	106	105	104	107	98	88	90	89	92	97	97	95	101	105	106	108	112	113	110	101		
8	Q	107	104	102	103	102	103	104	106	104	100	93	89	93	95	97	99	97	106	102	105	105	104	101	(101)			
9		95	89	95	100	100	102	104	107	107	98	93	88	88	91	94	94	95	96	99	101	103	102	100	104	98		
10	Q	102	100	99	99	99	101	102	103	101	96	93	89	88	92	94	95	96	96	96	99	106	111	108	102	99		
11		100	101	100	101	101	102	101	102	103	97	91	92	87	91	94	91	97	112	122	110	104	110	103	101	101		
12		103	105	103	99	93	100	95	100	101	94	89	86	80	88	96	95	122	143	113	112	110	127	114	108	103		
13	D	103	104	96	76	89	105	107	105	101	103	94	89	86	90	74	71	94	113	110	114	128	144	131	110	102		
14		104	103	89	98	103	98	102	100	96	88	90	86	85	94	100	96	100	101	105	112	121	134	114	102	101		
15		101	100	102	103	101	100	100	99	98	96	89	85	91					103	104	109	105	111	111	103	(101)		
16	Q	102	100	101	101	102	106	107	105	102	97	92	92	90	94	98	100	100	106	100	101	101	103	104	95	100		
17	Q	101	101	101	102	102	103	102	100	93	92	88	89	92	95	97	98	98	99	100	100	100	101	101	100	98		
18		97	97	97	99	99	99	100	96	88	85	84	85	86	89	92	91	94	99	107	97	99	100	100	101	95		
19		102	101	102	99	99	99	101	103	101	93	90	88	88	91	89	83	87	87	97	106	165	152	123	110	102		
20		105	103	104	104	103	100	98	91	93	89	87	91	94	94	97	98	95	111	111	105	107	95	110	109	100		
21		113	107	108	103	96	102	102	103	103	100	97	94	93	95	98	96	98	104	109	107	106	102	100	95	101		
22		91	102	102	102	101	100	100	99	98	89	83	80	70	72	73	83	92	123	121	123	129	128	114	101	99		
23		100	96	99	104	102	95	90	95	98	93	86	81	82	89	100	103	110	122	113	114	122	125	125	109	102		
24		106	100	97	101	102	100	92	99	97	100	101	94	85	80	86	94	112	107	139	162	142	130	126	125	107		
25		127	94	89	92	94	92	94	93	81	90	91	93	100	107	100	123	104	103	104	113	111	115	115	102	101		
26		94	93	101	101	102	101	101	98	95	90	89	93	86	96	101	102	119	107	108	109	110	111	109	107	101		
27	Q	101	99	100	99	98	101	103	103	98	92	90	90	92	95	99	100	101	99	110	102	101	101	109	106	100		
28		102	98	98	100	100	101	100	96	92	88	88								97	100	104	116	131	125	(102)		
29		123	112	108	105	105	104				99	96	91	92	91	91	96	97	95	96	93	94	99	99	100	117	95	(100)
30	D	107	110	104	100	98	101	100	98	99																(102)		
All Quiet Dist.		105	101	101	101	100	100	101	99	95	90	88	88	91	93	96	102	108	110	109	114	116	111	104	101	101		
		103	101	101	101	101	103	104	103	100	95	91	90	90	94	97	98	99	99	102	101	103	104	105	101	99		
		109	102	103	99	98	93	99	100	100	99	88	86	87	87	85	94	109	127	127	118	120	122	104	105	101		

Nurmijärvi Finland

December 2005 North component X in nT (X = 14900 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1	D																		-15	-13	-7	-4					(-10)
2									-14	-17	-19	-21	-17	-26	-11	-12	-12	-10	-11	-10	-2	-24	-3	-8	-13		(-13)
3			-21	-31	-24	-16	-16	-13	-12	-12	-10	-12	-14	-17		-13	2	-12	-26	-9	-7	0	-31	-31	-32		(-16)
4			-22	-19	-17	-15	-14	-14	-13	-14	-15	-17	-15	-12	-13	-14	-9	-13	-18	-11	-10	9	-15	-16	-14	-15	-14
5			-15	-15	-15	-16	-16	-16	-16	-16	-14	-12	-15	-15	-13	-11	-11	-12	-11	-11	-9	-10	-9	-10	-10	-12	-13
6	Q	-11	-12	-11	-10	-8	-6	-7	-10	-15	-17	-15	-12	-13	-11	-7	-7	-7	-9	-12	-11	-12	-7	-10	-13	-11	
7	Q	-13	-14	-13	-11	-10	-12	-14	-16	-17	-17	-15	-13	-8	-6	-6	-7	-7	-6	-7	-7	-9	-8	-9	-11	-11	
8	Q	-11	-12	-12	-12	-10	-8	-10	-13	-14	-15	-12	-8	-4	-2	-1	0	-1	-3	-7	-11	-15	-16	-16	-16	-10	
9		-19	-12	-13	-12	-8	-6	-6	-9	-12	-14	-13	-8	-5	-3	-4	-5	-4	-3	-2	2	-6	-25	-55	-21	-11	
10		-13	-17	-6	-19	5	3	-15	-15	-19	-20	-17	-17	-18	-17	-15	-22	-26	-22	-42	-49	-42	-31	-33	-6	-20	
11	D	-23	-35	-13	-3	-2	-1	-11	-10	-17	-32	-47	-26	-19	-23	-30	-55	-84	-83	-80	-47	-41	-43	-46	-39	-34	
12		-37	-26	-24	-34	-28	-21	-24	-25	-24	-25	-24	-24	-24	-24	-36	-35	-44	-32	-33	-41	-51	-32	-13	-21	-29	
13		-24	-21	-20	-22	-19	-16	-15	-16	-24	-24	-22	-18	-20	-34	-17	-14	-13	-13	-13	-21	-21	-19	-18	-17	-19	
14		-18	-17	-15	-11	-9	-11	-13	-15	-13	-15	-12	-12	-12	-14	-15	-15	-15	-16	-15	-16	-15	-12	-11	-12	-14	
15		-12	-12	-14	-10	-8	-11	-12	-13	-14	-17	-13	-7	-7	-9	-10	-11	-11	-10	-10	-11	-13	-14	-12	-15	-11	
16		-13	-11	-9	-9	7	6	-4	0	-7	-11	-14	-7	-4	-13	-14	-17	-23	-20	-17	-9	-15	-11	-11	-11	-10	
17		-12	-11	-10	-8	-6	-5	-5	-3	-4	-8	-11	-17	-18	-12	-10	-10	-9	-12	-8	-8	-7	-4	-3	-5	-9	
18		-8	-10	-6	-6	-3	1	1	-3	-5	-6	-11	-5	-1	-2	-3	-2	-2	0	-1	-3	-4	1	-1	-5	-3	
19		-8	-8	-9	-10	-6	-5	-4	-4	-1	0	-4	-2	-9	-9	-3	4	7	-9	-23	-8	-28	-16	-18	-8	-8	
20	D	-16	-29	-16	6	-5	-6	-12	-18	-22	-21	-16	-14	-27	-22	-15	-21	-28	-33	-21	-27	-7	-35	-28	-21	-19	
21		-19	-16	-15	-14	-12	-14	-11	-18	-18	-21	-20	-12	-25	-27	-20	-44	-36	-25	-26	-18	-19	-15	-16	-21	-20	
22		-19	-19	-14	-11	-9	-8	-10	-11	-13	-17	-14	-8	-9	-11	-12	-12	-11	-11	-14	-14	-15	-10	-13	-13	-12	
23	Q	-14	-12	-10	-10	-8	-8	-10	-12	-12	-13	-11	-5	-3	-5	-7	-8	-9	-8	-7	-7	-7	-8	-9	-10	-9	
24		-11	-10	-9	-8	-7	-6	-7	-10	-11	-8	-4	-5	-6	-16	-15	-17	-19	-20	-18	-15	-10	-17	-18	-16	-12	
25		-13	-13	-15	-15	-10	-4	-2	-9	-15	-10	-10	-10	-20	-18	-23	-26	-27	-24	-18	-17	-15	-14	-9	-13	-15	
26		-13	-13	-11	-10	-10	-9	-12	-14	-20	-17	-15	-11	-9	-13	-22	-24	-21	-20	-4	-17	-17	-14	-6	-1	-13	
27		-28	-10	-12	-9	-7	-10	-13	-15	-14	-12	-4	4	5	9	13	2	-27	-41	10	-16	-26	-25	-1	-29	-11	
28	D	-36	-45	-33	-20	-23	-22	-28	-20	-21	-31	-25	-21	-19	-25	-23	-20	-28	-16	-10	-20	-29	-29	-31	-49	-26	
29		-18	-24	-22	-21	-19	-21	-23	-20	-27	-23	-23	-22	-21	-19	-21	-17	-22	-17	-18	-17	-16	-9	-17	-23	-20	
30		-19	-21	-13	-13	-20	-12	-11	-8	-10	-17	-24	-20	-16	-14	-15	-15	-16	-16	-8	-16	-17	-7	-13	-28	-15	
31		-22	-11	-13	-16	-13	-11	-10	-8	-12	-18	-21	-19	-16	-6	-3	-15	-36	-31	-30	-20	-27	-21	-30	-29	-18	
All		-17	-17	-14	-13	-10	-9	-11	-12	-15	-16	-16	-13	-13	-13	-15	-19	-18	-16	-15	-17	-17	-17	-17	-18	-15	
Quiet		-12	-12	-12	-11	-9	-9	-10	-13	-14	-16	-13	-9	-7	-7	-6	-7	-7	-7	-7	-9	-10	-11	-11	-13	-10	
Dist.		-26	-30	-19	-7	-9	-10	-16	-16	-18	-24	-23	-14	-15	-15	-13	-24	-42	-38	-23	-23	-21	-33	-26	-34	-22	

December 2005 East component Y in nT (Y = 1600 nT + tabular values)

Day	Char	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean	
1	D																		107	115	107	128					(114)
2										95	96	96	94	94	101	98	94	102	95	94	130	127	111	99	91	118	(102)
3			103	87	89	107	103	103	104	102	100	98	93	94		100	121	118	104	108	119	130	116	112	113	104	(106)
4			101	101	105	108	106	105	106	102	100	96	93	92	94	102	99	96	106	105	111	121	122	106	106	107	104
5			100	105	107	105	105	106	104	100	95	94	94	96	100	102	104	103	106	104	105	105	104	103	103	103	102
6	Q	103	103	103	102	103	103	103	101	100	93	92	89	88	96	100	101	101	101	106	103	105	108	109	104	101	
7	Q	102	102	103	103	103	103	102	100	98	94	90	90	95	98	101	102	102	102	103	104	104	107	104	102	101	
8	Q	103	102	102	103	104	104	104	102	99	95	91	91	94	99	100	99	99	99	107	105	104	115	112	108	102	
9		104	101	103	101	102	103	104	105	103	98	93	91	90	93	94	97	100	99	100	99	102	142	149	112	103	
10		103	94	91	99	93	97	92	94	103	101	97	95	93	98	99	100	105	104	133	170	136	113	129	117	107	
11	D	115	97	104	104	107	99	96	98	109	111	99	97	105	108	108	127	169	132	195	133	124	151	138	106	118	
12		85	97	105	91	94	102	103	105	106	104	99	101	102	104	111	119	111	107	126	145	127	111	114	109	107	
13		108	108	104	101	103	105	107	109	107	102	98	95	99	110	99	104	104	104	103	110	125	116	109	109	106	
14		106	107	104	103	103	103	103	103	98	102	98	97	101	104	104	102	103	104	106	106	107	105	104	103	102	
15		101	103	104	102	102	103	104	103	99	98	95	92	98	101	102	103	103	103	104	104	106	110	107	102		
16		106	103	101	91	95	99	103	99	96	97	94	91	94	99	97	99	125	107	109	106	108	109	104	102	101	
17		101	100	100	99	99	101	102	100	99	97	94	94	89	96	99	99	99	107	102	103	105	104	104	101	100	
18		101	98	96	97	95	97	97	101	100	97	97	95	95	96	95	95	94	96	98	101	104	102	102	101	98	
19		100	98	98	98	97	100	101	102	101	100	96	94	98	93	94	96	95	96	112	178	123	105	104	105	103	
20	D	115	114	98	115	105	100	100	100	99	100	99	97	97	97	98	102	102	114	137	114	123	172	125	111	103	110
21		101	99	100	103	102	95	96	96	96	97	97	97	98	99	108	100	117	115	111	121	119	110	102	101	95	103
22		86	104	115	104	101	100	100	100	102	100	99	97	100	103	102	102	102	102	104	107	107	107	103	102	102	
23	Q	102	102	102	101	102	104	106	105	101	95	90	91	97	101	102	102	101	102	103	103	103	103	103	104	101	
24		105	103	103	102	102	103	104	103	101	97	92	92	95	98	100	96	102	103	103	108	125	110	108	97	102	
25		100	107	107	106	109	104	103	100	99	88	85	85	87	79	86	97	107	113	107	107	108	107	102	101	100	
26		102	104	104	103	104	105	107	106	103	98	94	95	96	96	98	92	97	106	117	136	117	108	128	145	107	
27	D	87	108	106	102	101	103	107	107	105	101	94	91	90	95	94	80	86	104	117	169	119	155	211	116	110	
28		123	107	92	104	105	104	111	109	104	108	107	101	94	108	98	117	95	104	125	131	125	126	155	128	112	
29		102	120	109	108	104	105	104	105	98	110	115	105	98	97	103	106	101	122	116	112	110	106	115	111	107	
30		105	102	97	104	97	98	109	109	109	105	106	99	97	97	102	103	102	116	128	114	115	129	136	131	109	
31		104	108	110	102	105	106	105	108	109	104	100	93	92	93	92	89	115	95	97	116	112	144	142	122	107	
All		103	103	102	102	102	102	103	102	101	99	96	94	96	99	99	102	106	106	114	119	116	115	117	109	104	
Quiet		102	102	103	102	102	103	104	102	99	95	92	91	94	99	101	101	101	101	105	104	104	108	108	105	101	
Dist.		110	106	100	106	104	101	104	104	104	105	100	96	97	102	100	106	116	117	133	132	134	139	154	113	111	

12 Hourly Means minus Monthly Means

12.1 All Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-10	-11	-3	-3	0	4	7	2	-3	-2	-4	0	4	6	8	3	16	15	2	2	-1	-9	-13	-10	14876
February	0	1	1	2	5	8	7	2	-3	-8	-12	-11	-6	-1	1	4	3	1	0	2	1	1	1	1	14886
March	1	0	0	3	7	6	1	-6	-14	-18	-16	-10	-4	4	4	5	6	7	5	4	3	3	5	2	14888
May	-1	1	2	1	5	2	-5	-13	-22	-26	-22	-14	-4	5	8	11	14	14	11	11	5	7	7	2	14889
April	-4	-5	-5	-3	-5	-17	-31	-36	-34	-29	-21	-5	8	35	38	30	29	23	19	10	6	2	1	-4	14885
June	2	1	2	1	-1	-5	-13	-20	-26	-26	-22	-12	0	6	15	17	20	21	25	15	8	4	-7	-2	14889
July	-5	-2	2	-4	-7	-6	-13	-19	-23	-26	-23	-15	0	14	27	27	22	21	18	12	4	-3	2	-4	14892
August	0	-3	-2	1	-1	-4	-9	-18	-25	-27	-20	-5	4	10	13	29	22	14	14	4	4	-4	2	2	14888
September	0	-5	-6	-2	-3	-4	-12	-17	-23	-24	-17	-4	6	21	18	19	10	11	8	7	4	3	4	6	14876
October	4	4	5	9	10	11	5	-5	-14	-19	-18	-12	-5	-1	0	0	2	4	3	4	3	2	5	5	14885
November	0	-1	2	4	6	8	6	0	-5	-7	-6	-4	-2	-1	-1	-2	-3	-3	-1	1	2	2	2	1	14884
December	-3	-3	1	2	5	6	3	2	0	-1	-1	2	2	2	2	0	-4	-4	-1	0	-2	-2	-2	-3	14885
Winter	-3	-4	0	1	4	6	6	2	-3	-4	-5	-3	-1	2	3	1	3	2	0	1	0	-2	-3	-3	14883
Equinox	1	0	0	3	5	4	-3	-10	-18	-22	-18	-10	-2	7	7	9	8	9	7	6	4	4	5	4	14884
Summer	-2	-2	-1	-1	-3	-8	-17	-23	-27	-27	-21	-10	3	16	23	26	23	20	19	10	5	-1	0	-2	14888
Year	-1	-2	0	1	2	1	-5	-11	-16	-18	-15	-8	0	9	11	12	12	11	8	6	3	0	1	0	14885

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	7	2	-4	-13	-15	-10	-7	1	-2	-2	-7	-12	-11	-7	-4	0	2	5	4	12	11	19	17	14	1685
February	3	4	5	2	-2	0	1	5	5	0	-8	-15	-18	-17	-13	-9	-7	1	8	16	10	10	8	9	1680
March	7	7	6	4	4	5	9	9	5	-4	-15	-24	-25	-22	-15	-5	2	5	6	9	9	10	6	7	1682
May	5	4	8	10	11	16	17	15	8	-3	-17	-29	-30	-25	-17	-9	0	1	4	6	6	6	10	8	1684
April	8	9	10	14	17	20	20	14	3	-8	-19	-27	-27	-27	-19	-11	-6	-4	-2	7	6	8	7	6	1687
June	10	12	14	16	20	20	22	19	7	-5	-19	-29	-31	-27	-19	-12	-9	-7	-1	2	4	3	4	7	1689
July	14	16	15	16	16	17	21	17	10	-1	-15	-25	-32	-28	-22	-18	-11	-6	-5	0	0	5	7	8	1691
August	7	9	10	15	17	21	20	15	6	-5	-12	-28	-34	-29	-19	-14	-5	-3	3	2	4	4	7	9	1693
September	6	1	5	6	8	9	9	6	0	-8	-17	-22	-22	-17	-8	-2	1	5	2	7	8	12	8	3	1698
October	5	2	1	1	2	5	7	8	5	-4	-13	-18	-20	-16	-10	-6	-3	2	6	12	11	8	6	7	1698
November	4	0	0	0	-1	-2	-1	0	-2	-6	-11	-13	-13	-10	-8	-5	1	8	9	8	13	15	10	3	1701
December	-2	-2	-3	-2	-3	-3	-2	-2	-3	-5	-9	-10	-9	-6	-5	-2	1	2	9	14	11	10	13	5	1705
Winter	3	1	0	-4	-5	-3	-2	1	-1	-3	-9	-12	-13	-10	-7	-4	-1	4	8	13	11	14	12	8	1693
Equinox	6	4	5	5	6	9	11	9	4	-5	-15	-23	-24	-20	-13	-5	0	3	5	9	8	9	7	6	1691
Summer	10	11	12	16	18	20	21	16	7	-5	-16	-27	-31	-28	-20	-14	-8	-5	-1	3	3	5	7	7	1690
Year	6	5	6	6	6	8	10	9	4	-4	-13	-21	-23	-20	-13	-8	-3	1	4	8	8	9	9	7	1691

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-32	-35	-28	-23	-16	-5	-1	3	3	7	8	12	18	21	21	25	30	24	18	9	4	-11	-21	-32	49702
February	-14	-18	-12	-10	-6	-4	-3	-2	-2	-3	-2	2	6	10	13	15	13	18	14	10	4	-2	-13	-11	49702
March	-17	-16	-13	-9	-5	-2	0	0	-1	-2	-2	2	6	12	15	17	18	15	11	8	-1	-5	-14	-17	49698
May	-16	-14	-12	-9	-5	-1	1	1	0	-2	-4	-1	8	13	16	18	18	15	11	6	-3	-8	-13	-19	49700
April	-21	-27	-25	-21	-15	-13	-5	-3	1	2	2	8	19	26	27	26	23	22	17	5	-4	-11	-14	-16	49710
June	-15	-17	-13	-13	-9	-5	-2	0	0	-1	-1	3	10	13	16	18	19	17	12	1	-2	-9	-10	-12	49709
July	-22	-22	-18	-16	-14	-9	-6	-4	-4	-4	-4	1	12	24	34	31	28	23	17	6	-2	-10	-18	-22	49711
August	-16	-14	-10	-7	-6	-5	-4	-4	-5	-5	-4	1	8	18	22	28	21	16	11	3	-3	-17	-17	-13	49717
September	-22	-26	-24	-22	-16	-11	-7	-2	2	6	8	15	20	30	31	32	29	23	7	-6	-15	-13	-16	-23	49728
October	-12	-10	-7	-6	-5	-3	-1	0	-1	-2	0	2	6	9	12	14	14	12	10	3	-3	-7	-12	-11	49724
November	-11	-9	-7	-5	-4	-3	-2	-2	-2	-1	1	4	6	8	9	11	14	13	9	4	3	-6	-11	-15	49726
December	-9	-7	-7	-6	-4	-3	-2	-1	-1	-1	0	2	4	5	4	7	9	9	7	4	2	-1	-5	-9	49727
Winter	-17	-17	-14	-11	-8	-4	-2	0	0	1	2	5	8	11	12	15	17	16	12	7	3	-5	-12	-17	49714
Equinox	-17	-16	-14	-11	-8	-4	-2	0	0	0	1	4	9	16	18	20	20	16	10	3	-6	-8	-14	-17	49713
Summer	-18	-20	-17	-14	-11	-8	-4	-3	-2	-2	0	2	3	12	20	25	26	23	19	14	4	-3	-12	-15	49712
Year	-17	-18	-15	-12	-9	-5	-3	-1	-1	0	0	4	10	16	18	20	20	17	12	4	-2	-8	-14	-17	49713

12.2 Quiet Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-3	-4	-3	-1	1	2	2	0	-4	-7	-7	-5	0	3	4	1	2	2	1	6	3	2	3	3	14886
February	-1	-1	0	0	2	2	2	1	-4	-10	-12	-11	-6	0	3	4	3	3	1	4	5	6	4	4	14893
March	2	3	1	4	5	4	-1	-10	-18	-20	-18	-11	-4	1	5	6	6	7	6	5	6	7	6	8	14891
May	3	4	6	8	8	4	-2	-10	-18	-23	-24	-20	-10	-1	2	4	6	8	10	10	10	9	9	8	14895
April	4	7	9	9	7	1	-8	-20	-30	-34	-26	-18	-9	1	3	8	15	15	15	14	10	8	10	9	14893
June	3	3	5	5	2	-3	-9	-17	-24	-28	-25	-15	-9	-1	1	8	10	13	18	18	16	12	10	8	14895
July	0	1	2	4	1	-4	-11	-19	-25	-27	-24	-17	-7	1	7	13	14	17	17	17	14	12	8	6	14897
August	3	1	1	2	0	-4	-10	-17	-25	-26	-23	-13	-2	6	11	11	11	10	12	15	11	8	10	9	14887
September	5	4	3	3	3	-1	-6	-12	-20	-22	-19	-8	-3	2	6	6	5	7	7	7	8	9	9	7	14883
October	1	2	3	5	8	8	5	-5	-15	-22	-23	-15	-7	0	3	3	4	6	7	7	7	8	7	6	14889
November	-2	-2	0	2	3	5	2	-4	-8	-8	-6	-2	2	3	2	1	2	2	1	1	1	3	1	1	14889
December	-2	-2	-2	0	1	1	0	-3	-4	-6	-3	1	3	4	4	4	3	3	1	1	-1	0	-1	-3	14890
Winter	-2	-2	-1	0	2	3	1	-1	-5	-8	-7	-4	0	2	3	3	3	2	1	3	2	3	2	1	14889
Equinox	3	3	3	5	6	4	-1	-9	-18	-22	-21	-13	-6	0	4	5	6	7	7	7	8	8	8	7	14890
Summer	2	3	4	5	3	-3	-10	-18	-26	-29	-24	-16	-7	2	6	10	12	14	15	16	13	10	9	8	14893
Year	1	1	2	3	3	1	-3	-10	-16	-19	-18	-11	-4	2	4	6	7	8	8	9	7	7	6	6	14891

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	2	1	0	0	2	3	5	5	3	0	-4	-8	-10	-7	-7	-6	-4	-4	-1	9	9	7	3	1	1678
February	2	1	1	2	3	5	7	9	9	3	-5	-11	-14	-12	-8	-3	-3	-3	1	5	3	4	2	1	1677
March	2	3	4	5	8	13	17	19	12	0	-11	-19	-22	-19	-13	-7	-5	-4	-1	1	6	4	4	4	1679
May	2	2	6	11	14	17	19	17	11	1	-14	-25	-28	-22	-12	-4	-1	1	1	1	3	1	0	0	1682
April	4	9	17	23	27	27	22	13	2	-11	-23	-31	-30	-24	-15	-7	-1	1	1	-2	-2	-2	0	2	1685
June	6	11	15	18	20	23	25	21	11	-1	-16	-27	-28	-24	-16	-10	-6	-5	-3	-3	-3	-3	-2	-2	1688
July	7	10	17	21	24	25	28	26	15	1	-14	-25	-31	-28	-23	-17	-11	-9	-7	-6	-7	-3	2	4	1689
August	6	10	13	19	20	20	20	16	7	-5	-18	-26	-26	-22	-17	-11	-8	-7	-6	-3	-1	6	7	8	1694
September	3	3	9	11	14	16	15	10	4	-4	-15	-22	-20	-15	-9	-4	-1	-2	-1	3	3	0	1	1	1696
October	3	3	4	4	5	8	12	14	12	2	-10	-18	-18	-13	-6	-4	-3	-2	-1	0	1	2	2	2	1697
November	3	1	1	2	1	3	4	4	0	-4	-8	-10	-9	-6	-3	-1	-1	0	3	1	3	5	6	1	1699
December	1	1	2	1	1	2	3	1	-2	-6	-10	-11	-7	-2	0	0	0	0	3	3	3	7	6	4	1701
Winter	2	1	1	1	2	3	5	5	2	-2	-7	-10	-10	-7	-4	-3	-2	-2	2	5	5	6	4	2	1689
Equinox	2	3	6	8	10	13	16	15	10	0	-12	-21	-22	-17	-10	-5	-2	-2	-1	1	3	2	2	2	1688
Summer	6	10	15	20	23	24	24	19	9	-4	-18	-27	-29	-25	-18	-11	-7	-5	-4	-4	-3	-1	2	3	1689
Year	3	5	7	10	12	13	15	13	7	-2	-12	-20	-20	-16	-11	-6	-4	-3	-1	1	2	2	3	2	1689

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-5	-2	-1	0	1	0	0	-1	-2	-1	-1	0	2	2	2	2	2	2	3	2	-1	-1	-1	-2	49706
February	0	-1	0	0	1	1	1	-1	-3	-5	-5	-2	0	2	3	3	2	3	4	2	0	-2	-2	-2	49701
March	-1	0	0	0	1	2	2	-1	-5	-8	-8	-5	-1	2	3	3	3	4	5	5	3	-1	-2	-2	49701
May	-1	1	3	4	3	2	2	-1	-4	-7	-11	-10	-5	-1	3	6	5	4	3	2	1	0	0	1	49702
April	0	3	4	3	0	-1	-2	-2	-6	-9	-9	-6	-3	1	4	5	6	6	3	2	1	1	0	-2	49711
June	2	3	4	1	-1	0	0	-1	-3	-9	-10	-7	-5	0	4	5	6	5	4	3	1	-1	-1	0	49713
July	0	3	2	2	3	1	-2	-5	-7	-9	-11	-8	-4	-1	3	4	5	6	6	5	4	3	1	-1	49709
August	0	-1	1	2	1	0	0	0	-3	-5	-5	-4	-1	2	3	3	3	2	3	3	4	2	0	-8	49717
September	-3	-5	-7	-2	0	0	0	-1	-2	-3	-5	-4	0	2	5	5	6	5	5	4	2	1	0	-1	49727
October	-3	-2	-1	-1	0	0	1	1	-1	-3	-3	-2	2	4	4	2	1	1	1	1	1	0	-1	-2	49724
November	-3	-1	0	0	0	0	0	-1	-2	-1	0	1	2	2	1	2	2	2	3	3	2	-1	-4	-4	49726
December	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	2	3	2	1	0	0	0	1	1	1	0	-1	-1	49726
Winter	-2	-1	-1	0	0	0	0	-1	-2	-2	-1	-1	2	2	2	2	1	2	3	2	1	-1	-2	-2	49715
Equinox	-2	-2	-1	0	1	1	1	-1	-3	-5	-7	-5	-1	2	4	4	4	4	4	3	2	0	-1	-1	49714
Summer	0	2	3	2	1	0	-1	-2	-5	-8	-9	-6	-3	1	3	4	5	5	4	3	2	1	0	-3	49712
Year	-1	0	0	1	0	0	0	-1	-3	-5	-6	-4	-1	1	3	3	3	3	3	3	2	0	-1	-2	49714

12.3 Disturbed Days

North Component X in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-16	-40	-1	-10	-11	1	10	-3	-17	0	6	28	29	24	30	26	103	81	5	4	-28	-64	-105	-53	14862
February	-12	-2	-7	-7	7	12	10	5	5	-4	-11	-6	3	7	0	10	9	7	8	7	-4	-5	-22	-6	14875
March	-7	-11	-5	1	13	6	-4	-6	-9	-7	-6	-4	-1	10	5	12	14	4	8	7	-2	-6	-1	-9	14881
May	-28	-14	-3	-22	-5	-2	-9	-13	-20	-24	-13	5	14	20	26	33	32	20	13	11	-5	1	1	-18	14878
April	-10	-21	-26	-22	-23	-52	-113	-113	-76	-45	-18	17	51	161	161	97	74	42	13	-13	-22	-29	-12	-22	14878
June	-1	-1	7	-4	-1	-9	-15	-23	-28	-18	-13	1	21	19	49	39	43	47	47	4	-18	-33	-76	-47	14880
July	-14	-3	2	-28	-39	-12	-12	-18	-24	-37	-29	-20	11	60	125	103	58	30	11	-15	-37	-66	-23	-24	14895
August	-3	-14	-12	-3	-5	-14	-19	-30	-32	-29	-10	36	40	48	28	122	75	20	11	-41	-37	-76	-39	-18	14889
September	-17	-18	-17	-24	-25	-17	-43	-38	-42	-28	-9	20	43	88	55	61	20	25	2	-2	-17	-16	-9	8	14866
October	2	5	8	24	18	19	8	-5	-11	-17	-15	-8	-5	-2	-2	-4	3	1	-7	-6	-6	-13	6	7	14878
November	3	-5	6	1	7	9	12	6	-2	-9	-7	-8	-10	-1	-4	-9	-9	-1	-1	4	0	7	3	0	14880
December	-4	-8	3	15	12	12	6	6	3	-2	-1	8	7	7	8	-2	-20	-16	-1	-1	0	-11	-5	-13	14878
Winter	-7	-14	0	-1	4	9	10	4	-3	-4	-3	6	8	10	9	7	25	19	3	3	-8	-20	-36	-19	14873
Equinox	-12	-10	-4	-5	0	1	-12	-16	-21	-19	-11	3	13	29	21	26	17	13	5	3	-8	-8	-1	-3	14876
Summer	-7	-10	-7	-14	-17	-22	-40	-46	-40	-32	-17	8	31	72	91	90	63	35	21	-16	-29	-51	-37	-28	14885
Year	-9	-11	-4	-7	-4	-4	-15	-20	-22	-19	-11	6	17	38	42	43	35	22	10	-4	-15	-27	-24	-17	14878

East Component Y in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-10	-10	-12	-35	-42	-17	-11	13	-2	8	-5	-9	-5	-3	0	-2	-5	33	6	8	-3	44	38	21	1694
February	14	21	26	2	-11	-8	-10	-7	-2	-6	-13	-21	-28	-25	-17	-25	-11	-5	16	46	15	22	2	15	1688
March	5	10	17	2	1	-6	-4	-10	-14	-13	-19	-28	-24	-27	-25	-6	23	17	25	35	19	23	-5	4	1686
May	10	8	14	14	-1	5	3	1	-4	-12	-22	-39	-33	-31	-25	-15	11	13	20	18	-1	7	38	22	1691
April	29	14	-2	2	13	19	34	30	12	-4	-16	-27	-36	-60	-40	-24	-17	-19	-11	31	16	27	21	9	1689
June	22	24	13	6	11	4	5	13	-7	-13	-23	-36	-38	-37	-32	-25	-23	-20	13	28	29	36	34	24	1691
July	18	21	10	6	-10	-5	17	13	16	2	-13	-21	-36	-29	-19	-30	-18	3	3	8	11	22	18	13	1691
August	11	20	15	12	17	22	19	12	-4	-8	22	-31	-48	-46	-36	-35	-13	-13	11	11	17	9	14	26	1695
September	11	0	7	7	3	9	-2	-8	-2	-10	-13	-24	-28	-20	-13	5	-4	8	0	21	10	19	17	6	1706
October	13	-2	-10	-9	-1	3	3	1	1	-9	-15	-19	-21	-20	-15	-11	-1	5	16	31	26	19	9	10	1699
November	7	0	1	-3	-4	-10	-3	-2	-3	-4	-14	-16	-15	-15	-18	-9	7	25	25	15	18	19	1	3	1702
December	-2	-6	-13	-6	-8	-11	-9	-9	-8	-8	-13	-16	-16	-10	-12	-6	3	4	21	20	21	27	41	1	1713
Winter	2	2	1	-11	-17	-12	-8	-1	-3	-2	-11	-16	-17	-14	-11	-9	-2	14	17	23	13	28	20	11	1698
Equinox	10	4	7	3	1	3	0	-4	-5	-11	-17	-28	-27	-25	-19	-7	7	11	15	26	13	17	15	10	1696
Summer	20	20	9	6	8	10	19	17	4	-6	-8	-29	-39	-43	-32	-29	-18	-12	4	19	18	23	22	18	1692
Year	11	9	6	0	-3	1	4	4	-1	-7	-12	-24	-28	-28	-21	-15	-4	4	12	23	15	23	19	13	1695

Vertical Component Z in nT

Month/Hour	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
January	-48	-112	-104	-67	-51	-12	3	21	16	31	37	49	62	59	60	63	87	77	39	-15	-6	-53	-72	-64	49698
February	-46	-68	-47	-35	-18	-6	-2	2	6	5	9	14	20	33	46	58	37	41	31	18	9	-12	-48	-26	49695
March	-41	-58	-40	-35	-19	-11	-2	4	10	10	12	18	22	31	35	56	63	48	23	3	-17	-23	-46	-43	49690
May	-49	-52	-47	-41	-22	-10	0	6	10	16	20	23	45	46	50	53	58	45	24	8	-27	-40	-48	-69	49690
April	-65	-93	-98	-79	-52	-51	-19	-6	15	27	31	48	81	90	81	63	41	52	36	0	-13	-36	-33	-21	49713
June	-45	-47	-26	-24	-25	-18	-10	1	5	9	15	22	42	43	46	54	50	51	36	-21	-21	-58	-41	-48	49697
July	-38	-38	-41	-53	-56	-41	-28	-15	-10	-6	-2	11	42	85	136	108	80	59	30	-19	-32	-54	-72	-46	49718
August	-37	-43	-25	-19	-18	-15	-15	-10	-9	-6	8	23	31	48	56	100	68	41	25	-10	-31	-83	-55	-26	49726
September	-73	-75	-65	-64	-47	-26	-20	0	15	37	45	62	71	104	87	91	65	51	-7	-45	-72	-41	-39	-58	49726
October	-29	-28	-23	-22	-19	-13	-8	-4	-1	0	6	9	13	20	30	41	48	44	38	5	-18	-23	-33	-18	49727
November	-14	-16	-16	-13	-10	-10	-5	-2	-2	1	5	13	18	20	26	33	35	25	13	-3	-1	-13	-36	-25	49725
December	-28	-17	-24	-20	-15	-10	-5	-2	0	1	4	5	6	8	6	16	29	25	15	6	6	2	-7	-13	49728
Winter	-34	-55	-49	-34	-24	-9	-2	5	5	10	14	21	28	31	36	44	48	43	26	2	3	-21	-43	-34	49711
Equinox	-48	-53	-44	-40	-26	-15	-7	2	9	16	21	28	38	50	51	61	58	46	18	-7	-34	-31	-41	-47	49708
Summer	-46	-55	-47	-44	-38	-31	-18	-8	0	6	13	26	49	66	80	81	60	51	32	-12	-24	-57	-50	-35	49714
Year	-43	-55	-47	-39	-29	-18	-9	0	5	11	16	25	38	50	57	63	56	47	25	-6	-19	-37	-45	-39	49711

13 Monthly and Annual Means

All days

	Z	H	D	F	X	Y	I
January	49702	14972	6° 27.7'	51908	14876	1685	73° 14.2'
February	49702	14980	6° 26.4'	51910	14886	1680	73° 13.6'
March	49698	14983	6° 26.8'	51908	14888	1682	73° 13.4'
May	49700	14984	6° 27.1'	51910	14889	1684	73° 13.3'
April	49710	14980	6° 28.0'	51918	14885	1687	73° 13.8'
June	49709	14984	6° 28.4'	51918	14889	1689	73° 13.5'
July	49711	14988	6° 28.6'	51921	14892	1691	73° 13.3'
August	49717	14984	6° 29.2'	51926	14888	1693	73° 13.6'
September	49728	14973	6° 30.8'	51934	14876	1698	73° 14.6'
October	49724	14981	6° 30.5'	51932	14885	1698	73° 14.0'
November	49726	14981	6° 31.2'	51934	14884	1701	73° 14.1'
December	49727	14983	6° 32.0'	51935	14885	1705	73° 14.0'
Winter	49714	14979	6° 29.3'	51922	14883	1693	73° 14.0'
Equinox	49713	14980	6° 28.8'	51921	14884	1691	73° 13.8'
Summer	49712	14984	6° 28.5'	51921	14888	1690	73° 13.6'
Year	49713	14981	6° 28.9'	51921	14885	1691	73° 13.8'

5 Quiet days

	Z	H	D	F	X	Y	I
January	49706	14980	6° 25.9'	51914	14886	1678	73° 13.7'
February	49701	14987	6° 25.5'	51911	14893	1677	73° 13.2'
March	49701	14985	6° 26.0'	51911	14891	1679	73° 13.3'
May	49702	14990	6° 26.6'	51913	14895	1682	73° 13.0'
April	49711	14988	6° 27.3'	51921	14893	1685	73° 13.3'
June	49713	14990	6° 27.9'	51924	14895	1688	73° 13.2'
July	49709	14992	6° 28.2'	51920	14897	1689	73° 13.0'
August	49717	14983	6° 29.5'	51926	14887	1694	73° 13.7'
September	49727	14980	6° 30.0'	51934	14883	1696	73° 14.1'
October	49724	14985	6° 30.0'	51933	14889	1697	73° 13.7'
November	49726	14986	6° 30.7'	51935	14889	1699	73° 13.7'
December	49726	14987	6° 31.1'	51935	14890	1701	73° 13.7'
Winter	49715	14985	6° 28.3'	51924	14889	1689	73° 13.6'
Equinox	49714	14985	6° 28.1'	51923	14890	1688	73° 13.5'
Summer	49712	14988	6° 28.2'	51923	14893	1689	73° 13.3'
Year	49714	14986	6° 28.2'	51923	14891	1689	73° 13.5'

5 Disturbed days

	Z	H	D	F	X	Y	I
January	49698	14958	6° 30.0'	51901	14862	1694	73° 14.9'
February	49695	14970	6° 28.5'	51901	14875	1688	73° 14.1'
March	49690	14976	6° 27.9'	51898	14881	1686	73° 13.7'
May	49690	14974	6° 29.0'	51897	14878	1691	73° 13.8'
April	49713	14974	6° 28.6'	51920	14878	1689	73° 14.2'
June	49697	14976	6° 29.1'	51905	14880	1691	73° 13.8'
July	49718	14990	6° 28.5'	51929	14895	1691	73° 13.3'
August	49726	14985	6° 29.8'	51935	14889	1695	73° 13.8'
September	49726	14964	6° 32.9'	51929	14866	1706	73° 15.1'
October	49727	14974	6° 30.9'	51932	14878	1699	73° 14.5'
November	49725	14977	6° 31.6'	51932	14880	1702	73° 14.3'
December	49728	14976	6° 34.0'	51934	14878	1713	73° 14.4'
Winter	49711	14970	6° 30.9'	51916	14873	1698	73° 14.4'
Equinox	49708	14972	6° 30.2'	51914	14876	1696	73° 14.3'
Summer	49714	14981	6° 29.0'	51922	14885	1692	73° 13.8'
Year	49711	14975	6° 30.0'	51917	14878	1695	73° 14.2'

14 Hourly Means of All Days as Sequenced in Bartels' 27-day Solar Rotation Number

14.1 H-Component

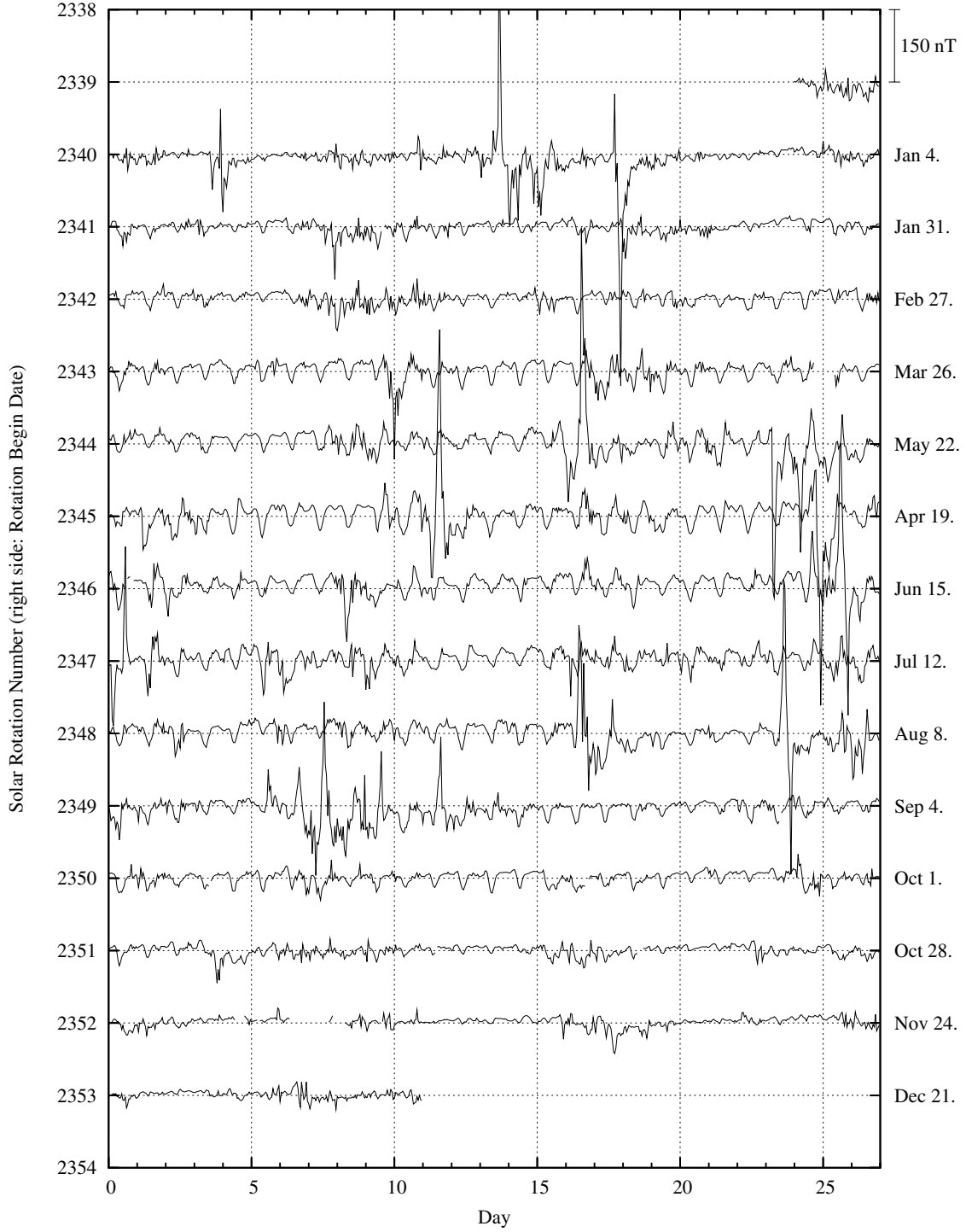


Figure 8: Hourly means of H sequenced in Bartels' solar rotation cycles.

14.2 D-Component

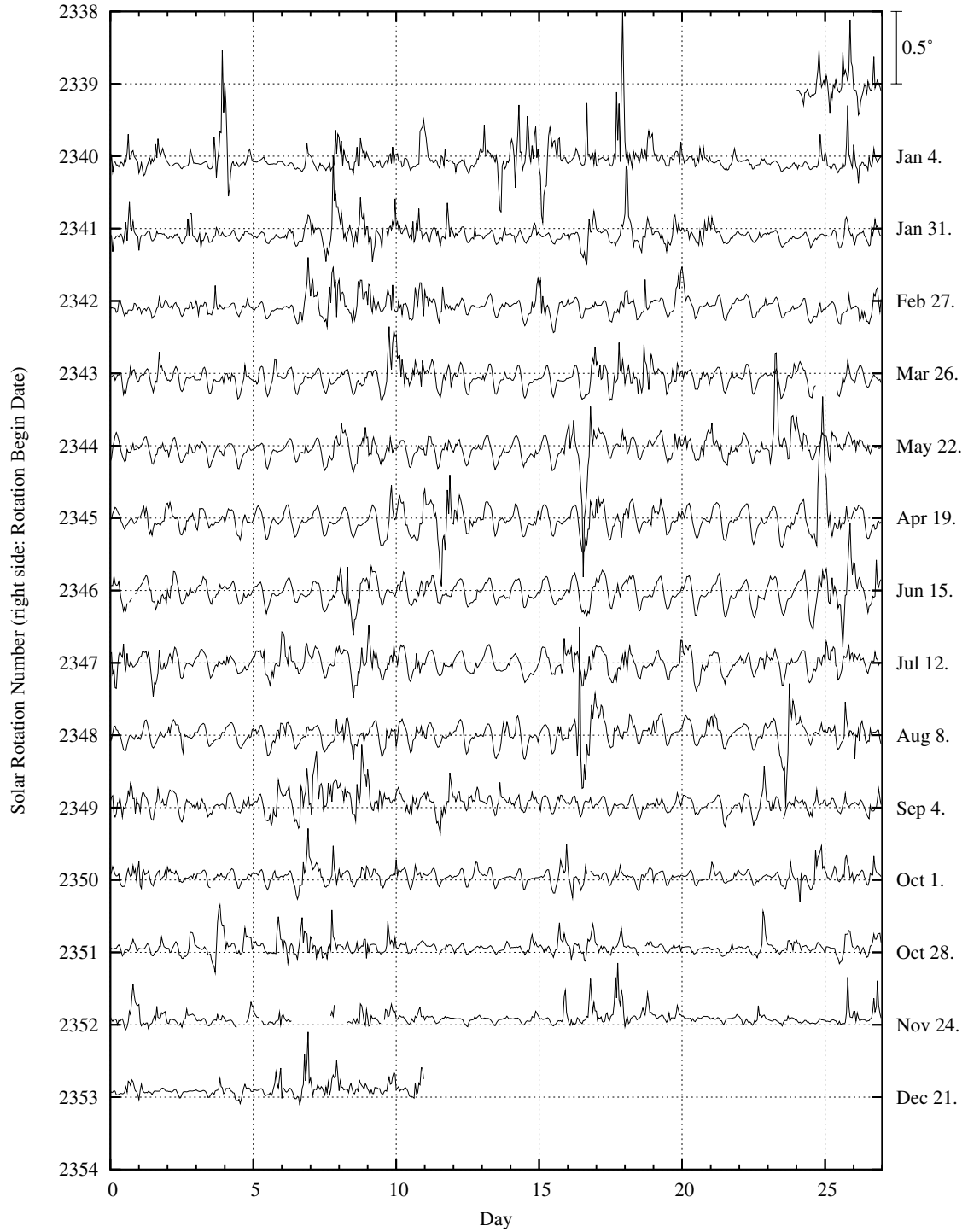


Figure 9: Hourly means of D sequenced in Bartels' solar rotation cycles.

14.3 Z-Component

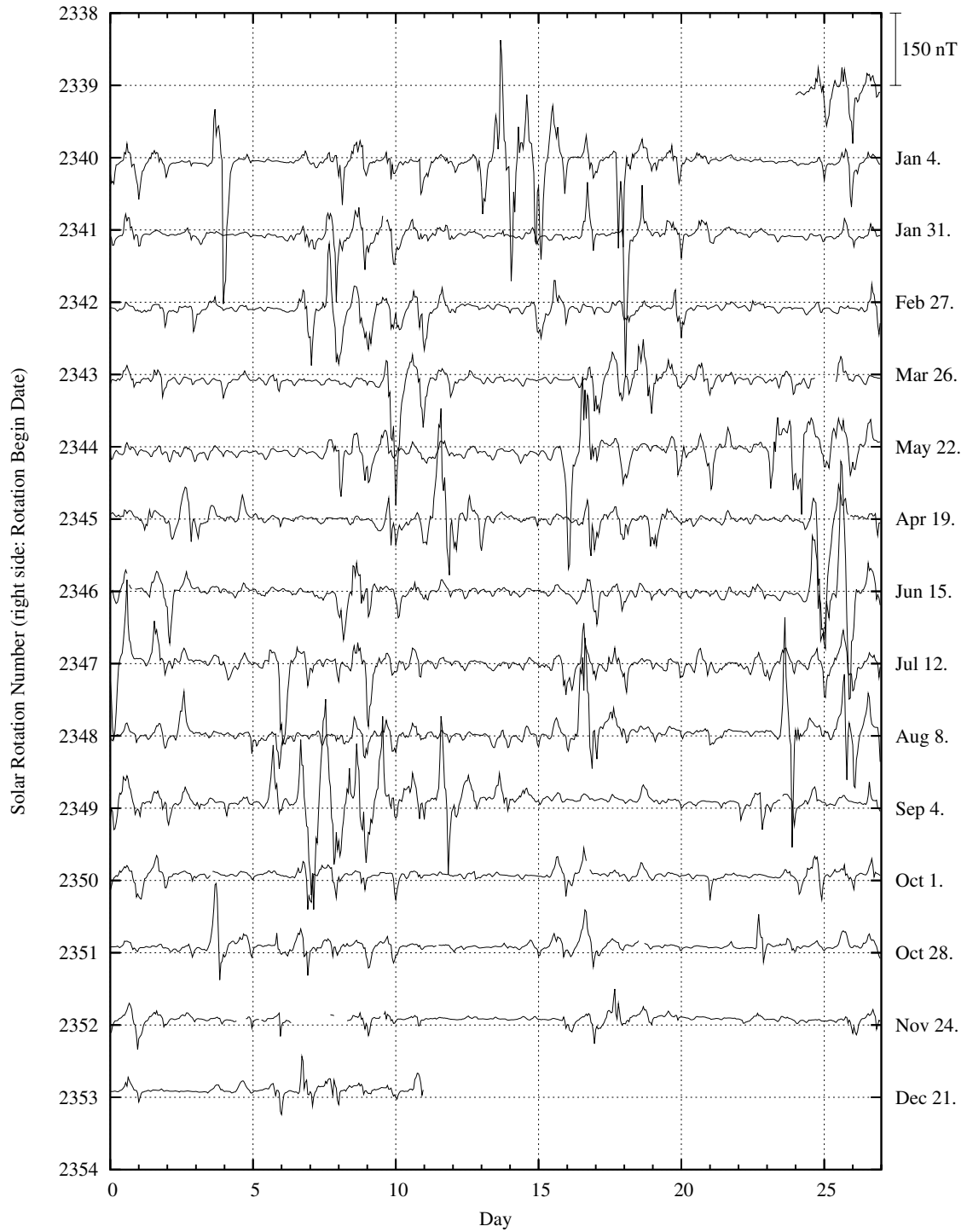


Figure 10: Hourly means of Z sequenced in Bartels' solar rotation cycles.

15 K-Indices

15.1 Monthly Tables of K-Indices

January										February										March																								
Day					K					Ak					Day					K					Ak					Day					K					Ak				
1	2	2	2	2	2	4	4	4	3	13	1	3	0	1	1	1	2	1	1	5	1	2	2	3	2	2	2	2	2	8														
2	4	4	4	4	3	2	6	4	6	36	2	0	1	1	1	2	4	4	2	10	2	3	2	2	3	2	4	2	2	12														
3	3	3	2	3	3	3	4	4	2	16	3	2	3	2	1	1	2	1	2	7	3	1	1	1	1	1	2	3	1	5														
4	4	3	3	3	3	5	5	4	3	26	4	0	0	0	2	2	2	1	1	3	4	1	0	1	1	0	1	0	2	15														
5	3	2	3	3	3	3	4	3	3	16	5	0	0	1	0	1	0	1	0	1	6	1	2	2	2	2	3	4	5	15	2													
6	1	1	1	1	0	1	1	4	1	6	6	0	2	2	2	1	1	3	3	7	6	4	3	3	3	3	4	5	5	26														
7	0	0	0	1		4	5	4	8	43	7	3	3	2	2	4	3	6	6	31	7	4	3	4	4	4	5	6	4	35														
8	6	5	3	3	3	3	2	3	3	26	8	3	4	3	3	3	5	5	5	29	8	4	5	3	3	2	4	5	5	29														
9	0	0	0	3		1	1	1	0	3	9	3	4	3	3	3	4	5	23	9	3	3	3	2	3	4	5	4	21	2														
10	0	1	0	1		1	2	3	3	6	10	4	3	3	3	4	4	5	3	24	10	4	3	2	3	3	3	3	2	15														
11	2	2	2	1		1	4	2	4	11	11	2	2	2	3	2	2	4	3	12	11	1	1	1	2	1	1	0	2	4														
12	3	4	3	3		4	5	5	3	26	12	1	1	1	1	2	1	3	0	5	12	1	0	0	0	0	1	1	2	2														
13	2	2	3	2		2	4	4	3	14	13	1	1	1	0	0	2	3	0	4	13	1	0	0	1	1	2	3	4	7														
14	2	2	2	2		1	2	5	5	17	14	1	2	1	1	1	1	2	3	6	14	4	3	2	3	3	2	2	2	13														
15	3	3	2	3		3	4	3	1	14	15	1	0	1	1	0	0	2	1	2	15	2	0	1	1	1	0	0	3	4														
16	3	2	2	2		3	3	3	3	12	16	2	1	1	1	3	4	4	4	14	16	1	0	0	2	3	2	2	3	7														
17	4	3	4	5		5	9	6	5	87	17	2	1	0	1	1	2	1	3	5	17	2	3	1	2	2	4	3	2	11														
18	6	5	6	5		5	5	5	6	60	18	6	4	3	2	3	5	3	2	27	18	1	1	1	1	1	2	4	4	10														
19	5	5	4	5		5	5	3	3	37	19	1	2	2	3	3	4	4	3	15	19	4	3	1	2	2	0	1	1	8														
20	2	2	2	3		4	5	4	3	19	20	3	2	2	1	2	4	4	4	15	20	0	1	1	1	1	1	1	1	3														
21	4	2	2	2		3	6	9	9	118	21	3	1	1	1	1	1	2	2	5	21	0	0	1	2	2	2	2	2	5														
22	5	4	3	3		4	4	4	3	25	22	0	0	0	0	1	2	2	2	3	22	0	0	1	0	1	1	2	1	2														
23	3	3	2	3		3	5	3	4	20	23	1	0	1	1	1	0	2	1	3	23	0	0	1	1	2	1	3	2	5														
24	3	2	1	2		3	3	3	2	11	24	0	0	1	1	3	1	1	2	4	24	1	0	0	1	3	1	3	2	6														
25	1	1	1	1		1	1	3	1	5	25	1	1	2	3	2	3	3	2	9	25	1	3	3	3	4	3	3	4	17														
26	1	0	0	1		0	0	2	1	2	26	3	1	2	3	3	3	3	1	11	26	1	2	3	3	4	3	3	2	13														
27	0	0	1	0		0	0	1	1	1	27	0	2	2	1	2	1	2	1	5	27	2	2	2	3	3	4	3	2	13														
28	1	1	1	1		0	1	4	3	7	28	2	2	2	3	2	3	2	3	10	28	1	1	1	1	1	1	3	3	6														
29	3	2	2	3		3	3	5	4	19											29	0	1	1	1	1	1	1	3	4														
30	3	3	2	2		3	3	2	2	11											30	2	2	2	2	2	3	1	1	7														
31	3	2	2	2		5	4	4	1	18											31	1	3	2	1	1	3	3	3	10														
Mean										23.4	Mean										10.5	Mean										10.5												

May										April										June																								
Day					K					Ak					Day					K					Ak					Day					K					Ak				
1	0	1	2	1	2	1	2	2	2	5	1	4	3	3	3	4	3	4	2	19	1	3	2	2	3	2	2	1	1	8														
2	1	0	1	1	1	1	1	0	1	2	2	2	2	1	2	3	2	2	2	8	2	1	2	1	2	2	2	2	3	7														
3	2	1	1	1	1	1	2	2	3	6	3	2	2	2	3	4	4	3	2	14	3	2	2	2	3	3	2	2	1	9														
4	1	1	2	3		3	4	6	6	29	4	2	2	0	1	2	2	2	1	5	4	2	2	2	2	4	4	5	4	20														
5	6	5	3	3		3	3	3	4	29	5	1	1	0	2	2	2	1	0	4	5	3	3	3	3	3	3	3	4	18														
6	3	2	1	2		2	3	3	3	11	6	1	0	0	1	3	2	2	2	5	6	3	3	2	1	2	2	1	4	11														
7	3	1	2	2		2	2	0	1	6	7	1	1	1	2	4	3	3	5	15	7	3	3	2	3	4	2	2	2	13														
8	2	0	1	1		2	1	2	1	4	8	5	4	4	6	9	8	6	5	119	8	2	1	1	1	2	1	1	1	4														
9	1	0	0	1		1	0	1	1	2	9	3	3	1	2	2	3	3	4	13	9	2	0	0	2	2	1	2	2	5														
10	0	0	0	1		1	1	0	0	1	10	3	2	2	2	2	2	2	3	9	10	1	1	0	1	1	1	1	0	2														
11	1	1	0	1		2	3	4	4	11	11	1	1	1	2	3	3	4	4	13	11	1	1	1	2	1	2	2	2	5														
12	4	4	3	3		4	4	5	5	29	12	2	3	2	2	3	4	3	3	14	12	2	1	2	5	5	6	7	8	72														
13	3	3	3	3		4	5	4	4	24	13	4	3	3	3	3	4	2	2	16	13	6	4	4	3	4	2	3	1	25														
14	3	3	2	2		3	3	4	3	15	14	1	1	2	2	2	2	3	0	6	14	2	2	1	2	3	1	5	3	13														
15	2	2	2	2		3	3	3	3	11	15	5	5	8	6	4	4	5	4	68	15	3	4	3	2	4	3	2	1	15														
16	2	1	1	1		1	2	2	2	5	16	5	6	6	4	5	5	2	2	43	16	0	1	3	4	5	5	3	3	21														
17	0	2	1	1		1	1	1	1	3	17	3	3	2	3	3	5	2	3	17	17	4	3	2	3	3	3	3	1	14														
18	1	2	1	2		2	2	2	3	7	18	3	2	2	2	3	3	1	1	9	18	1	2	2	2	3	2	2	1	7														
19	2	1	2	2		3				8	19	1	2	3	3	3	2	2	2	10	19	1	1	2	1	3	3	1	1	7														
20						4	3	4	1	18	20	3	4	4	4	4	4	2	3	22	20	1	1	1	2	2	2	1	0	4														
21	1	1	0	0		1	1	1	1	2	21	3	3	3	3	3	3	5	2	18	21	0	0	0	1	0	1	1	1	2														
22	2	1	1	1		3	2	3	2	8	22	3	2	1	3	3	1	1	1	8	22	2	1	1	3	3	2	2	3	9														
23	1	1	1	1		2	3	3	1	7	23	2	1	2	1	3	2	1	1	6	23	4	5	5	4	5	4	5	3	36														
24	2	2	2	2		3	1	2	2	8	24	1	0	0	1	2	0	1	2	3	24	3	3	2	3	3	1	1	2	10														
25	2	2	2	2		2	2	1	2	7	25	2	1	1	2	2	2	0	0	4	25	2	3	2	2	2	4	2	3	12														
26	1	0	1	1		1	0	2	1	3	26	0	1	1	1	1	0	0	0	2	26	3	2	3	3	2	2	1	2	10														
27	0	0	0	1		2	0	0	0	1	27	0	1	1	2	2	0	0	0	3	27	1	0	1	1	2	2	2	1	4														
28	0	0	0	1		2	2	2	1	3	28	1	1	2	2	3	4	4	3	13	28	1	1	1	1	2	2	1	1	4														
29	0	1	1	2		3	3	3	4	11	29	3	2	3	3	2	3	3	5	17	29	2	1	1	2	3	3	1	1	7														
30	4	3	3	4		4	4	3	4	23	30	4	3	5	6	7	9	7	5	112	30	2	1	2	2	2	3	2	2	8														
31											31	3	3	3	3	5	2	2	2	16																								
Mean										10.0	Mean										20.4	Mean										12.7												

July

Day	K				Ak
1	2	2	2	1	3 5 4 3 16
2	3	2	3	3	2 3 3 3 13
3	2	2	2	2	3 1 1 2 7
4	1	1	1	2	1 1 1 2 4
5	1	1	1	3	3 1 0 1 6
6	1	1	1	1	2 2 1 2 5
7	1	2	1	1	3 3 2 2 8
8	2	1	1	1	2 2 1 2 5
9	2	2	2	5	6 5 5 4 34
10	4	4	3	6	8 7 6 7 94
11	3	3	4	4	3 3 5 2 21
12	4	5	3	5	7 5 3 2 44
13	2	2	4	5	5 5 3 4 28
14	2	3	2	1	3 1 0 1 7
15	1	1	0	2	2 2 2 2 5
16	3	2	2	1	2 3 2 1 8
17	2	2	3	4	4 4 3 4 19
18	4	4	3	2	3 2 3 4 18
19	3	1	1	2	2 2 1 3 8
20	3	2	2	4	5 3 4 3 20
21	4	5	3	2	3 4 3 3 21
22	3	2	2	3	4 4 3 2 15
23	2	1	1	1	1 3 0 2 5
24	0	0	1	2	2 2 2 1 4
25	1	1	1	1	2 1 1 2 4
26	1	1	1	1	1 2 2 2 5
27	2	2	1	2	4 3 4 4 15
28	3	5	2	3	4 3 3 4 21
29	3	3	2	3	4 4 3 3 17
30	4	3	3	2	2 1 2 2 11
31	1	1	2	2	4 2 2 4 11
Mean					16.1

August

Day	K				Ak
1	3	2	3	4	3 3 2 3 15
2	2	2	2	3	3 3 2 1 10
3	2	2	2	2	3 3 3 4 13
4	2	2	3	2	3 2 2 2 9
5	1	1	1	2	2 3 3 3 9
6	3	3	3	4	4 4 3 3 20
7	4	3	3	3	3 3 3 3 17
8	2	1	1	1	3 2 1 2 6
9	2	1	2	2	2 3 3 3 10
10	2	1	3	4	4 3 1 1 13
11	1	0	1	2	2 1 1 1 4
12	1	1	0	1	2 2 2 3 6
13	2	2	2	4	4 2 4 4 17
14	3	3	1	2	2 1 2 2 8
15	0	1	1	2	3 2 2 3 7
16	3	3	2	3	4 3 2 3 15
17	3	2	2	3	4 3 3 3 15
18	3	2	3	3	3 4 3 2 15
19	2	1	1	2	3 1 2 2 7
20	1	1	1	1	2 1 2 0 4
21	1	1	1	1	3 5 3 3 13
22	2	3	2	2	3 3 1 3 11
23	2	1	2	3	3 3 3 2 11
24	3	2	5	9	8 7 7 4 127
25	5	3	2	3	5 5 3 3 26
26	2	2	2	2	1 2 2 2 7
27	3	1	2	2	2 1 0 1 6
28	1	1	1	2	1 1 2 3 6
29	3	2	2	1	1 1 0 1 5
30	0	0	0	1	1 0 3 2 4
31	1	2	2	3	6 9 7 8 112
Mean					17.7

September

Day	K				Ak
1	4	3	2	2	3 2 1 3 12
2	2	2	3	3	5 5 6 3 29
3	5	5	4	4	5 2 2 3 28
4	3	3	4	5	4 4 3 4 25
5	3	2	2	3	2 3 3 2 11
6	3	2	2	2	3 3 1 2 10
7	3	3	1	2	1 0 1 0 6
8	2	1	1	2	2 2 2 1 6
9	1	2	1	2	5 4 4 4 19
10	2	2	3	4	4 5 5 5 28
11	6	6	7	6	8 6 5 5 100
12	4	3	6	4	4 5 6 6 48
13	4	3	4	5	6 3 4 3 32
14	2	2	3	3	3 3 4 2 14
15	3	2	3	5	5 7 6 5 50
16	3	2	3	3	4 3 4 3 17
17	1	2	1	3	3 4 3 3 13
18	1	2	2	3	3 2 2 1 8
19	2	1	1	2	2 2 2 1 6
20	1	1	1	2	1 1 1 1 4
21	1	0	0	1	1 1 0 0 2
22	1	1	1	1	1 2 2 1 4
23	2	2	2	1	1 1 2 2 6
24	2	0	0	0	1 1 1 0 2
25	0	0	1	3	2 2 0 2 5
26	3	2	2	3	3 2 4 4 15
27	3	3	2	1	2 2 2 4 11
28	2	2	2	2	2 4 2 2 10
29	2	2	1	3	2 3 1 1 8
30	1	1	1	1	3 2 3 4 10
Mean					18.0

October

Day	K				Ak
1	3	2	2	2	2 2 4 3 12
2	4	3	2	2	2 4 1 3 14
3	2	2	2	2	1 0 2 1 5
4	2	1	1	2	1 1 2 1 5
5	1	0	0	1	1 1 2 2 3
6	1	0	0	1	1 2 2 0 3
7	1	1	2	2	2 2 4 4 11
8	3	3	4	3	3 2 5 3 20
9	3	2	2	2	2 1 4 3 11
10	2	2	2	2	1 1 1 3 7
11	3	1	1	1	2 3 2 2 8
12	0	1	0	0	1 0 0 2 2
13	1	1	1	1	0 1 3 1 4
14	1	1	1	1	0 0 0 1 2
15	0	0	1	0	0 0 0 1 1
16	0	1	1	1	1 2 3 4 8
17	3	3	2	2	4 3 1 1 12
18	0	1	1	1	2 2 2 1 4
19	2	2	1	1	2 2 2 2 6
20	2	0	1	1	0 1 1 1 3
21	0	0	0	1	0 0 0 3 2
22	4	2	1	1	1 0 2 1 7
23	1	0	0	1	1 1 1 0 2
24	1	0	0	1	1 2 3 1 4
25	4	4	2	3	2 4 4 4 21
26	2	1	2	2	3 5 4 3 16
27	3	1	1	3	3 4 2 1 11
28	1	0	1	2	2 2 3 2 6
29	0	0	1	1	1 2 3 1 4
30	1	1	0	1	1 1 3 3 6
31	0	1	1	1	3 4 6 5 22
Mean					7.8

November

Day	K				Ak
1	3	1	1	2	2 4 2 3 11
2	2	1	1	1	1 1 4 4 10
3	3	4	3	3	3 4 5 3 22
4	3	3	3	3	2 4 4 2 16
5	2	3	3	2	2 2 3 3 11
6	4	2	3	2	2 4 4 4 18
7	3	1	2	1	1 1 2 2 6
8	1	0	1	1	0 1 2 1 3
9	2	0	1	1	0 0 1 1 2
10	0	0	2	1	0 0 2 2 3
11	1	2	1	1	1 3 3 2 7
12	2	2	1	2	2 4 4 3 13
13	2	3	1	2	3 3 2 4 12
14	3	3	1	2	2 1 3 3 10
15	1	1	1	1	1 2 4 4
16	0	0	0	1	0 2 1 2 3
17	1	0	1	0	0 0 0 0 1
18	0	0	0	0	1 2 2 0 2
19	0	0	0	0	2 3 4 4 10
20	1	2	2	2	1 2 2 3 7
21	2	2	1	1	1 1 1 1 4
22	2	0	1	1	2 3 2 3 7
23	1	2	2	1	2 2 2 3 7
24	2	1	2	2	2 3 3 3 10
25	3	2	2	2	2 3 2 3 10
26	2	0	1	2	1 2 1 2 5
27	0	1	0	0	0 1 2 2 3
28	1	0	1		2 2 4 4
29	1	0	1		0 1 1 5 12
30	2	1	2		
Mean					7.8

December

Day	K				Ak
1				3	
2		2	2		3 2 3 3 11
3	3	2	2	2	3 4 3 3 14
4	1	0	1	1	2 2 3 1 5
5	2	0	0	1	1 1 1 0 2
6	0	0	0	1	1 1 1 2 2
7	0	0	0	0	0 0 0 1 0
8	0	0	0	0	0 0 2 2 2
9	1	0	0	0	1 1 2 4 5
10	2	3	2	1	1 2 4 3 11
11	3	2	2	2	2 6 5 4 25
12	3	2	2	1	2 2 4 3 11
13	1	1	1	1	2 1 3 2 6
14	0	1	2	1	1 0 0 1 2
15	1	1	0	1	0 0 0 1 2
16	1	2	1	2	2 3 2 1 7
17	0	0	0	1	2 2 0 1 3
18	1	0	1	1	1 0 0 1 2
19	1	1	1	2	1 2 5 3 11
20	3	3	2	2	3 3 4 3 15
21	1	1	2	2	3 4 2 2 10
22	3	1	1	1	0 0 1 1 4
23	0	0	0	0	0 0 0 0 0
24	0	0	0	1	2 1 3 3 5
25	2	1	1	1	2 2 0 1 4
26	0	0	0	0	1 1 4 4 8
27	3	1	0	2	2 3 6 5 22
28	3	3	2	2	3 3 3 5 17
29	4	2	3	2	2 3 3 3 14
30	2	2	1	2	1 3 3 3 9
31	3	1	1	1	2 3 4 4 13
Mean					7.8

15.2 K-Indices Sequenced in Bartel's Solar Rotation Number

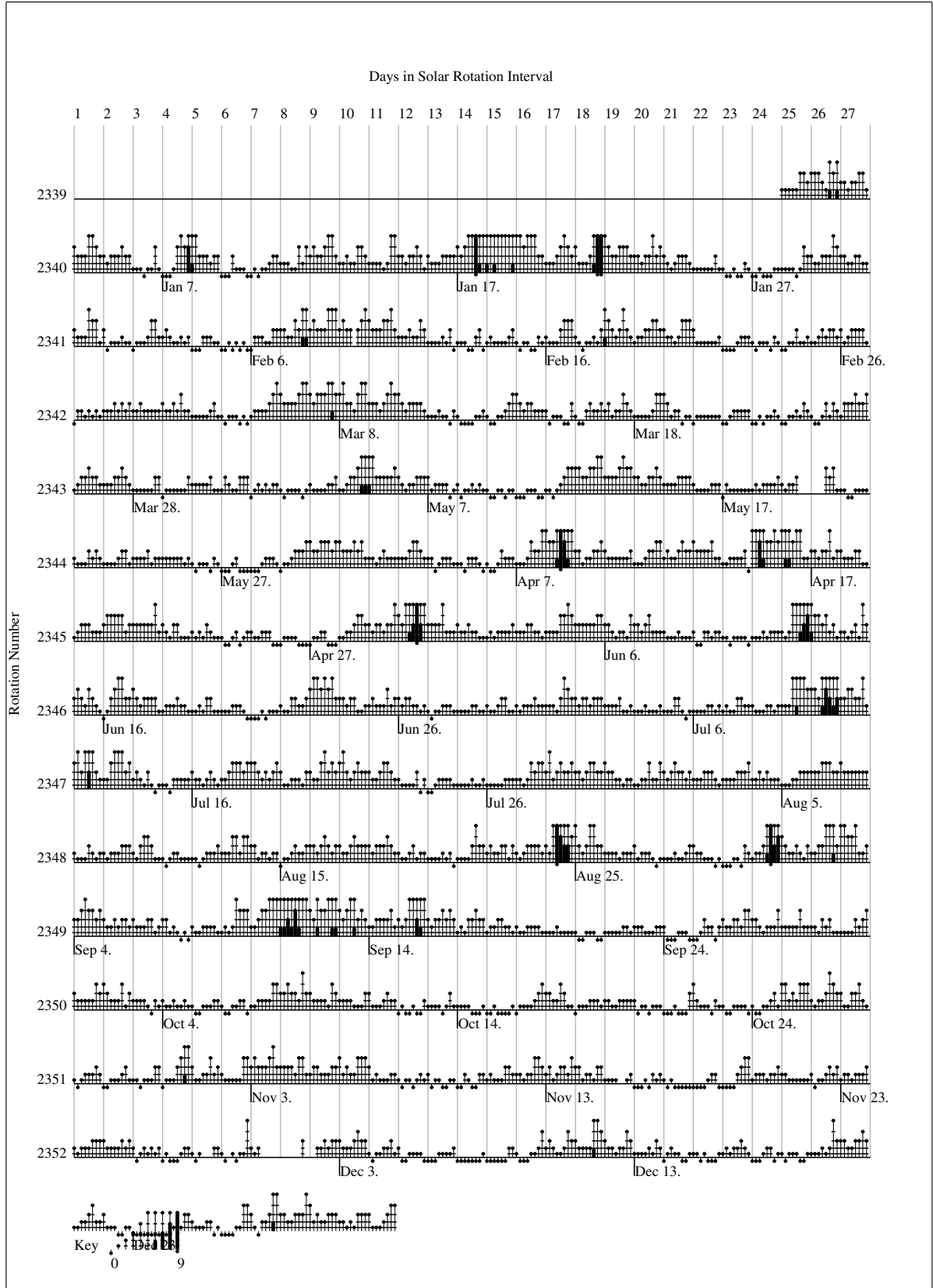


Figure 11: K-indices sequenced in Bartel's solar rotation number

15.3 Ak-Indices

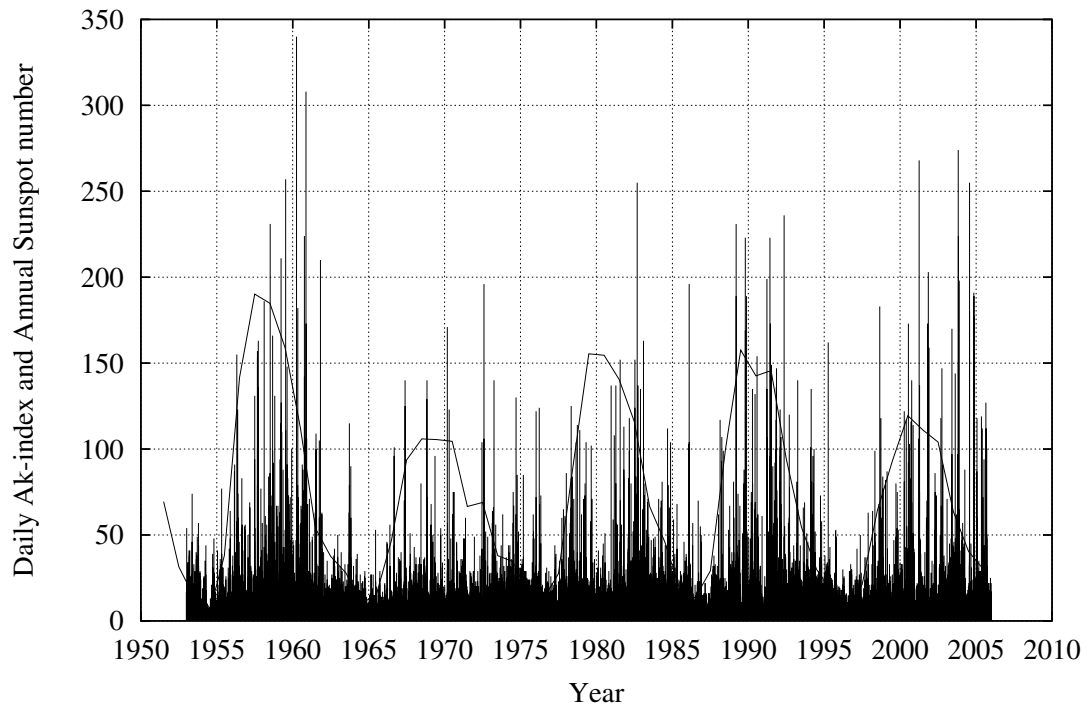


Figure 12: Daily Ak-indices (vertical lines) and sunspots (solid line)

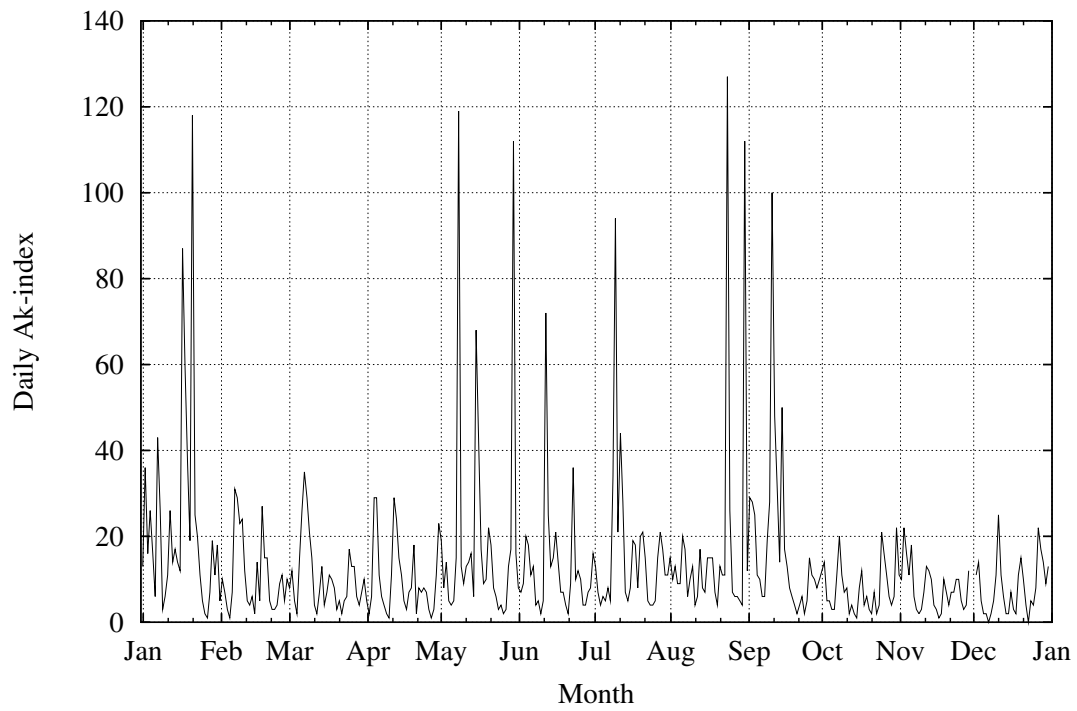


Figure 13: Daily Ak-indices

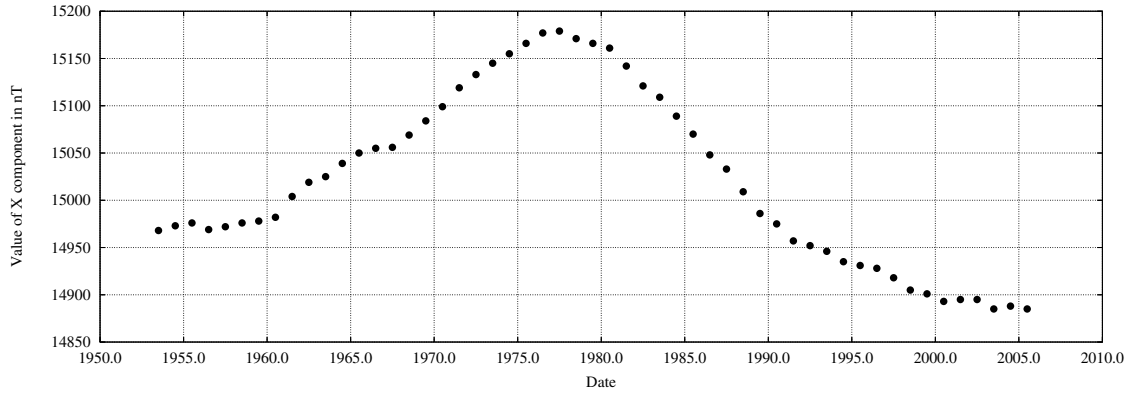
15.4 Table of Annual Ak-indices

m/M denotes sunspot minimum/maximum

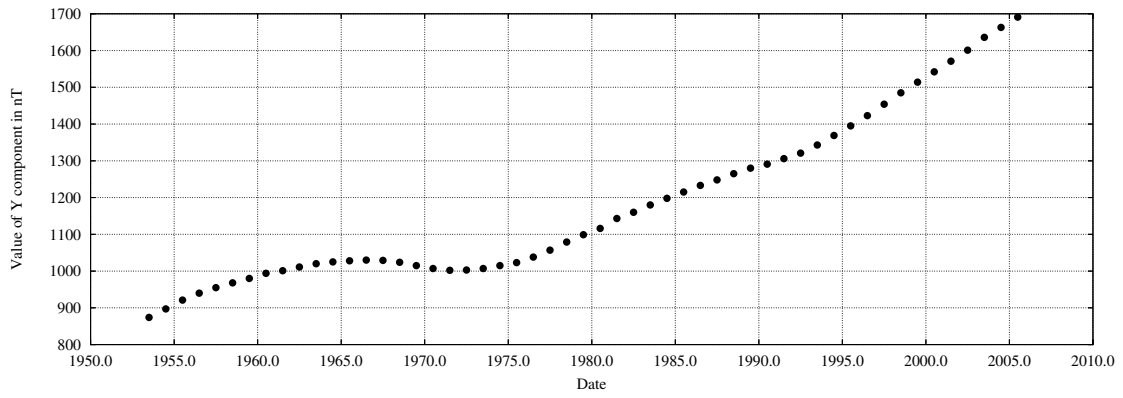
Year	Ak
1953	11
1954m	8
1955	9
1956	14
1957M	16
1958	18
1959	21
1960	22
1961	12
1962	10
1963	10
1964m	8
1965	6
1966	8
1967	10
1968M	11
1969	10
1970	10
1971	9
1972	10
1973	13
1974	15
1975	11
1976m	10
1977	9
1978	13
1979M	12

Year	Ak
1980	9
1981	13
1982	19
1983	15
1984	14
1985	10
1986m	10
1987	8
1988	11
1989M	16
1990	13
1991	21
1992	15
1993	13
1994	16
1995	11
1996m	9
1997	8
1998	12
1999	12
2000M	15
2001	14
2002	13
2003	22
2004	14
2005	14

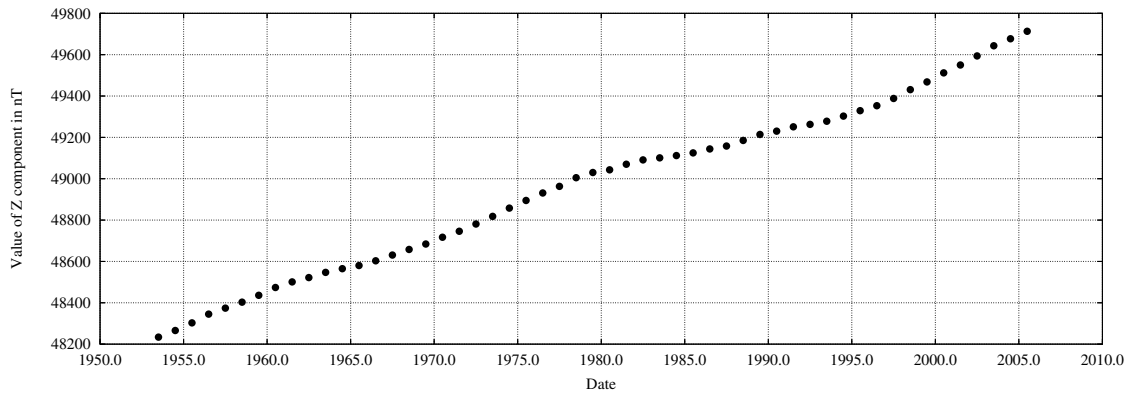
16 Annual Means



(a) Annual means for X component

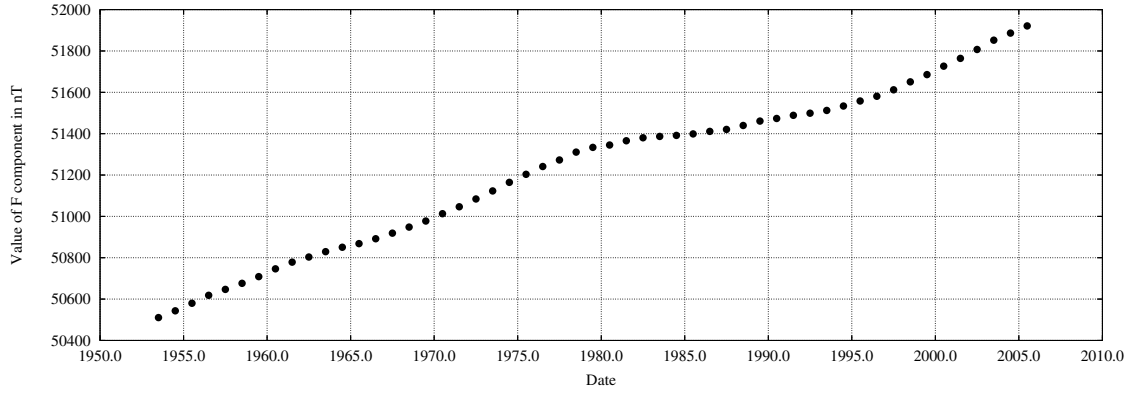


(b) Annual means for Y component

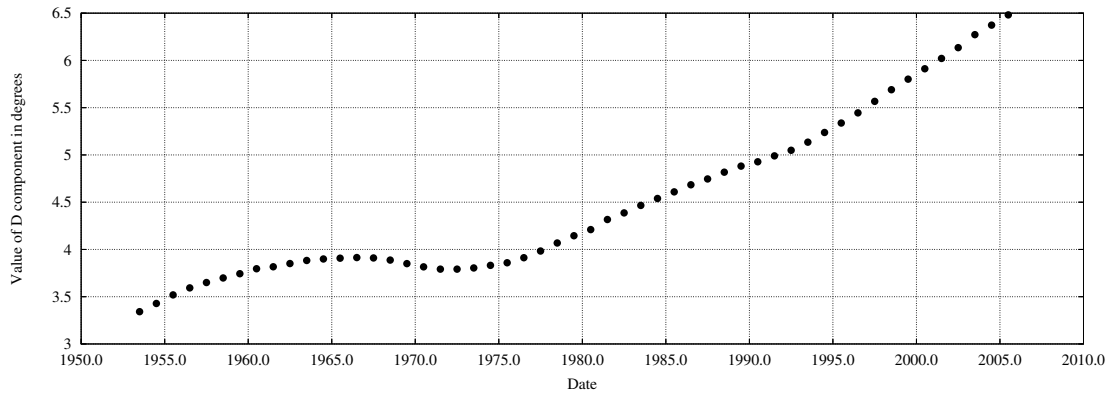


(c) Annual means for Z component

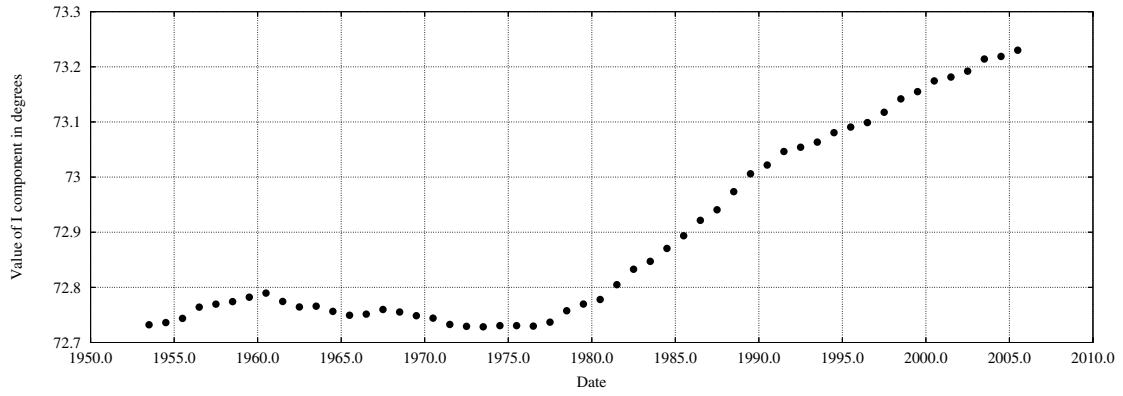
Figure 14: Figures of annual means of X, Y, and Z



(a) Annual means for F component



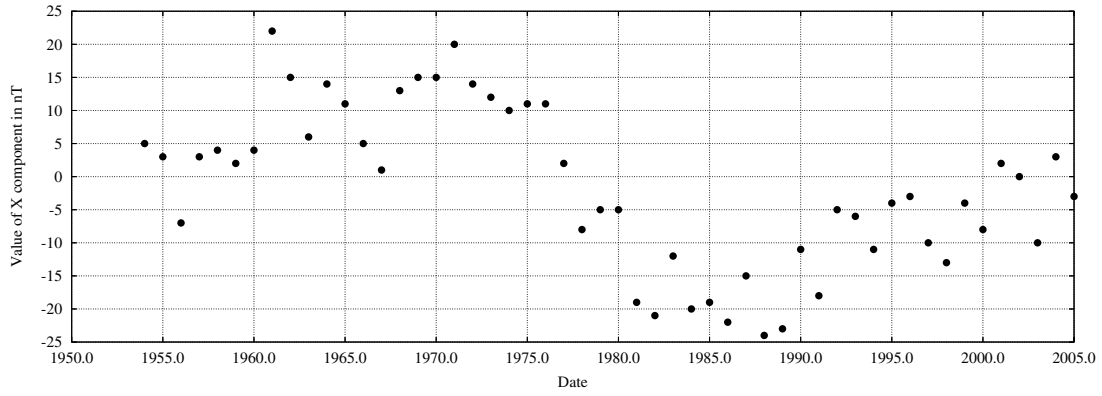
(b) Annual means for D component



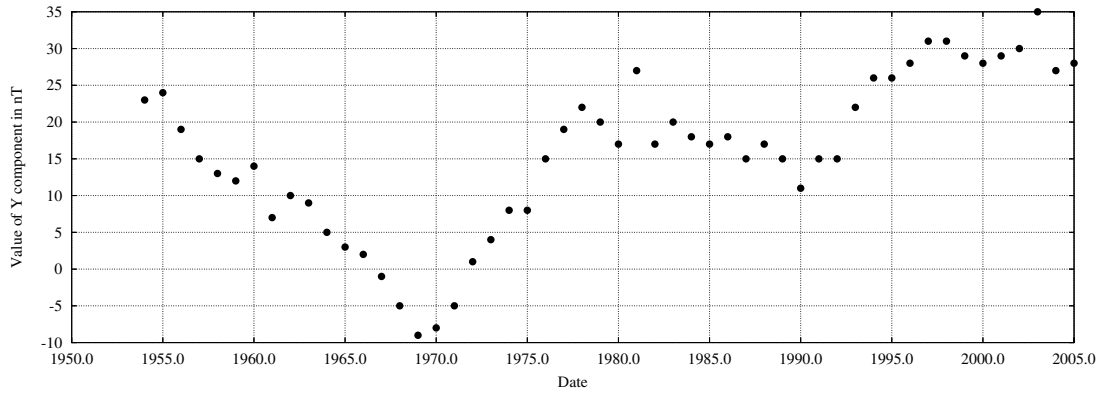
(c) Annual means for I component

Figure 15: Figures of annual means of F, D, and I

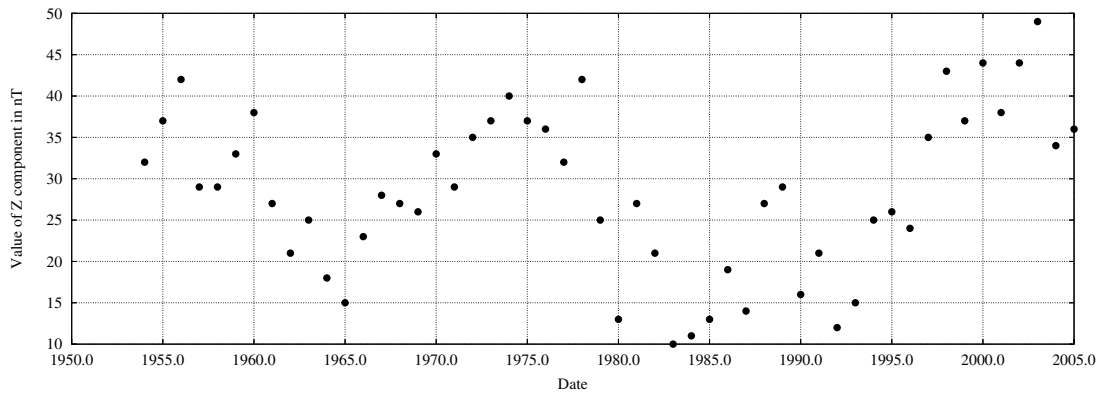
17 Secular Variation



(a) Annual change of X component

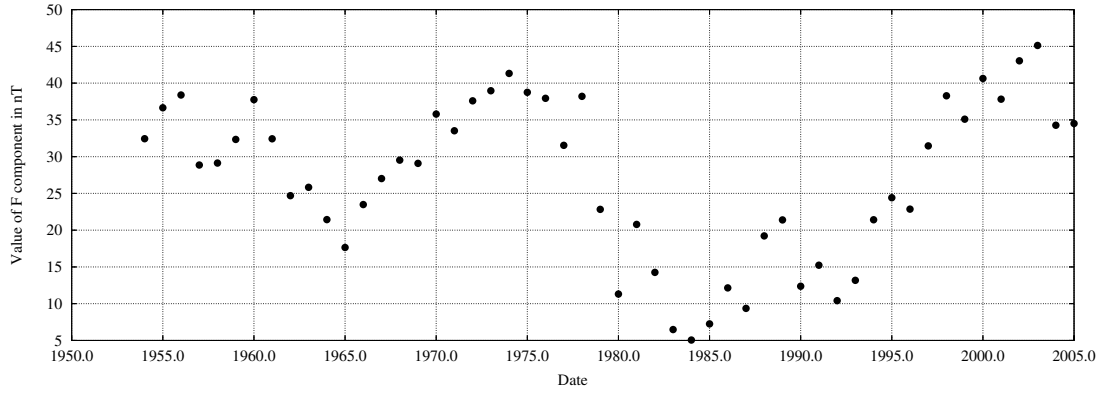


(b) Annual change of Y component

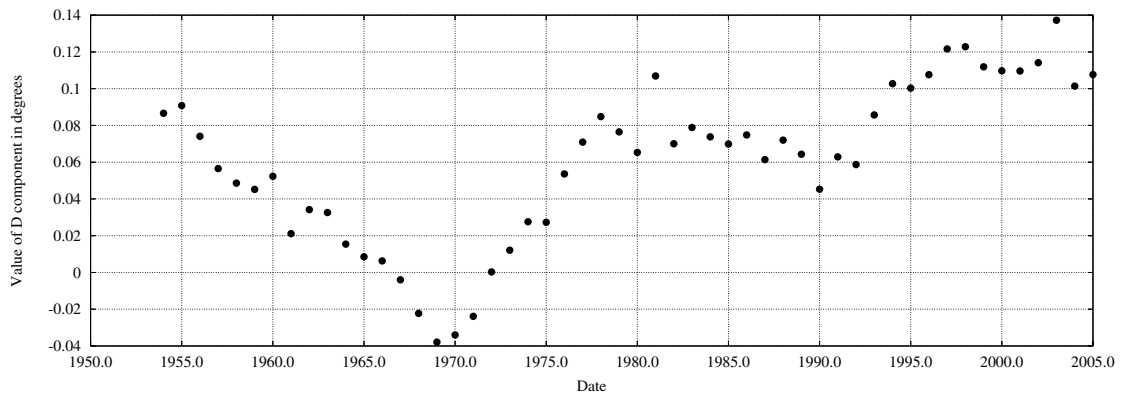


(c) Annual change of Z component

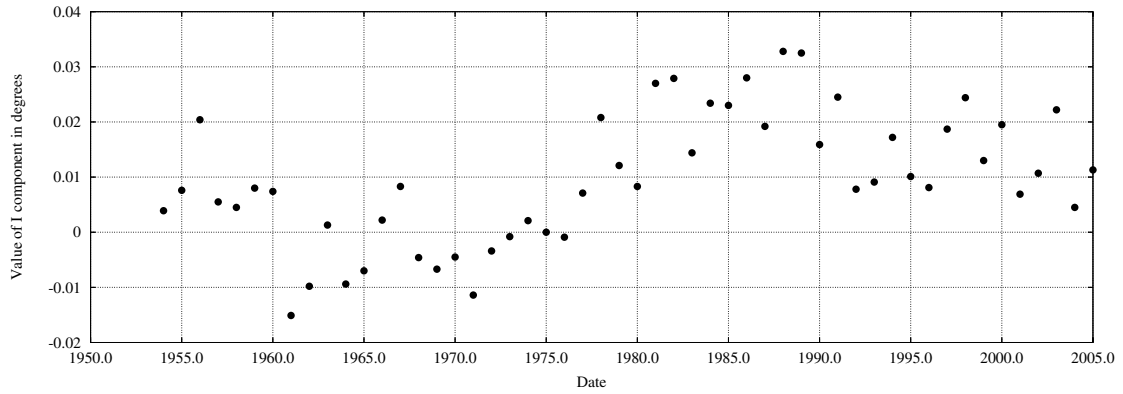
Figure 16: Annual change of components X, Y, and X



(a) Annual change of F component



(b) Annual change of D component



(c) Annual change of I component

Figure 17: Annual change of components F, D, and I

18 Tables of Annual Means

18.1 All Days

Year	X	Y	Z	D	H	F	I
1953	14968	874	48234	3° 20.5'	14993	50511	72° 43.9'
1954	14973	897	48266	3° 25.7'	15000	50543	72° 44.2'
1955	14976	921	48303	3° 31.1'	15004	50580	72° 44.6'
1956	14969	940	48345	3° 35.6'	14998	50618	72° 45.8'
1957	14972	955	48374	3° 39.0'	15002	50647	72° 46.2'
1958	14976	968	48403	3° 41.9'	15007	50676	72° 46.4'
1959	14978	980	48436	3° 44.6'	15010	50708	72° 46.9'
1960	14982	994	48474	3° 47.7'	15015	50746	72° 47.4'
1961	15004	1001	48501	3° 49.0'	15037	50779	72° 46.5'
1962	15019	1011	48522	3° 51.1'	15053	50803	72° 45.9'
1963	15025	1020	48547	3° 53.0'	15060	50829	72° 45.9'
1964	15039	1025	48565	3° 53.9'	15074	50851	72° 45.4'
1965	15050	1028	48580	3° 54.5'	15085	50868	72° 45.0'
1966	15055	1030	48603	3° 54.8'	15090	50892	72° 45.1'
1967	15056	1029	48631	3° 54.6'	15091	50919	72° 45.6'
1968	15069	1024	48658	3° 53.3'	15104	50948	72° 45.3'
1969	15084	1015	48684	3° 51.0'	15118	50977	72° 44.9'
1970	15099	1007	48717	3° 48.9'	15133	51013	72° 44.6'
1971	15119	1002	48746	3° 47.5'	15152	51047	72° 44.0'
1972	15133	1003	48781	3° 47.5'	15166	51084	72° 43.8'
1973	15145	1007	48818	3° 48.2'	15178	51123	72° 43.7'
1974	15155	1015	48858	3° 49.9'	15189	51165	72° 43.8'
1975	15166	1023	48895	3° 51.5'	15200	51203	72° 43.8'
1976	15177	1038	48931	3° 54.8'	15212	51241	72° 43.8'
1977	15179	1057	48963	3° 59.0'	15216	51273	72° 44.2'
1978	15171	1079	49005	4° 04.1'	15209	51311	72° 45.5'
1979	15166	1099	49030	4° 08.7'	15206	51334	72° 46.2'
1980	15161	1116	49043	4° 12.6'	15202	51345	72° 46.7'
1981	15142	1143	49070	4° 19.0'	15185	51366	72° 48.3'
1982	15121	1160	49091	4° 23.2'	15165	51380	72° 50.0'
1983	15109	1180	49101	4° 27.9'	15155	51387	72° 50.8'
1984	15089	1198	49112	4° 32.4'	15136	51392	72° 52.2'
1985	15070	1215	49125	4° 36.6'	15119	51399	72° 53.6'
1986	15048	1233	49144	4° 41.1'	15098	51411	72° 55.3'
1987	15033	1248	49158	4° 44.7'	15085	51420	72° 56.4'
1988	15009	1265	49185	4° 49.1'	15062	51440	72° 58.4'
1989	14986	1280	49214	4° 52.9'	15041	51461	73° 00.4'
1990	14975	1291	49230	4° 55.6'	15031	51473	73° 01.3'
1991	14957	1306	49251	4° 59.4'	15014	51489	73° 02.8'
1992	14952	1321	49263	5° 02.9'	15010	51499	73° 03.3'
1993	14946	1343	49278	5° 08.1'	15006	51512	73° 03.8'
1994	14935	1369	49303	5° 14.2'	14998	51534	73° 04.8'
1995	14931	1395	49329	5° 20.3'	14996	51558	73° 05.4'
1996	14928	1423	49353	5° 26.7'	14996	51581	73° 05.9'
1997	14918	1454	49388	5° 34.0'	14989	51612	73° 07.1'
1998	14905	1485	49431	5° 41.4'	14979	51651	73° 08.5'
1999	14901	1514	49468	5° 48.1'	14978	51686	73° 09.3'
2000	14893	1542	49512	5° 54.7'	14973	51726	73° 10.5'
2001	14895	1571	49550	6° 01.2'	14978	51764	73° 10.9'
2002	14895	1601	49594	6° 08.1'	14981	51807	73° 11.5'
2003	14885	1636	49643	6° 16.3'	14975	51852	73° 12.9'
2004	14888	1663	49677	6° 22.4'	14981	51887	73° 13.1'
2005	14885	1691	49713	6° 28.9'	14981	51921	73° 13.8'

18.2 Quiet Days

Year	X	Y	Z	D	H	F	I
1953	14975	872	48235	3° 20.0'	15000	50514	72° 43.5'
1954	14977	895	48266	3° 25.2'	15004	50544	72° 43.9'
1955	14980	919	48302	3° 30.6'	15008	50580	72° 44.4'
1956	14978	936	48343	3° 34.6'	15007	50619	72° 45.2'
1957	14978	951	48372	3° 38.0'	15008	50647	72° 45.8'
1958	14984	965	48400	3° 41.1'	15015	50676	72° 45.9'
1959	14986	976	48433	3° 43.6'	15018	50708	72° 46.4'
1960	14993	989	48474	3° 46.4'	15026	50749	72° 46.7'
1961	15010	998	48501	3° 48.2'	15043	50780	72° 46.1'
1962	15022	1009	48523	3° 50.6'	15056	50805	72° 45.7'
1963	15032	1018	48547	3° 52.5'	15066	50831	72° 45.5'
1964	15042	1024	48566	3° 53.7'	15077	50852	72° 45.2'
1965	15051	1027	48581	3° 54.2'	15086	50869	72° 44.9'
1966	15059	1028	48602	3° 54.3'	15094	50892	72° 44.8'
1967	15062	1028	48630	3° 54.3'	15097	50920	72° 45.2'
1968	15073	1022	48657	3° 52.7'	15108	50948	72° 45.1'
1969	15089	1013	48684	3° 50.4'	15123	50979	72° 44.6'
1970	15104	1005	48715	3° 48.4'	15137	51013	72° 44.3'
1971	15124	1001	48746	3° 47.2'	15157	51048	72° 43.6'
1972	15139	1001	48780	3° 47.0'	15172	51085	72° 43.4'
1973	15151	1004	48819	3° 47.5'	15184	51126	72° 43.4'
1974	15162	1012	48859	3° 49.1'	15196	51167	72° 43.4'
1975	15171	1020	48896	3° 50.8'	15205	51206	72° 43.5'
1976	15182	1035	48930	3° 54.0'	15217	51242	72° 43.5'
1977	15184	1054	48963	3° 58.2'	15221	51274	72° 43.9'
1978	15178	1075	49003	4° 03.1'	15216	51311	72° 45.0'
1979	15171	1096	49028	4° 07.9'	15211	51333	72° 45.8'
1980	15163	1115	49042	4° 12.3'	15204	51345	72° 46.5'
1981	15148	1140	49067	4° 18.2'	15191	51365	72° 47.9'
1982	15128	1157	49090	4° 22.4'	15172	51381	72° 49.5'
1983	15115	1176	49101	4° 26.9'	15161	51388	72° 50.5'
1984	15095	1195	49113	4° 31.6'	15142	51394	72° 51.9'
1985	15076	1212	49125	4° 35.8'	15125	51401	72° 53.2'
1986	15055	1230	49144	4° 40.2'	15105	51413	72° 54.9'
1987	15037	1246	49158	4° 44.2'	15089	51422	72° 56.2'
1988	15014	1262	49182	4° 48.3'	15067	51438	72° 58.1'
1989	14995	1276	49213	4° 51.8'	15049	51463	72° 59.8'
1990	14982	1288	49227	4° 54.8'	15037	51472	73° 00.8'
1991	14965	1302	49248	4° 58.3'	15022	51488	73° 02.2'
1992	14959	1318	49261	5° 02.1'	15017	51499	73° 02.8'
1993	14952	1341	49277	5° 07.5'	15012	51513	73° 03.4'
1994	14944	1365	49304	5° 13.1'	15006	51537	73° 04.3'
1995	14937	1392	49328	5° 19.4'	15002	51559	73° 05.1'
1996	14934	1421	49353	5° 26.1'	15001	51583	73° 05.6'
1997	14923	1452	49388	5° 33.4'	14993	51614	73° 06.7'
1998	14910	1484	49431	5° 41.0'	14984	51652	73° 08.2'
1999	14905	1512	49467	5° 47.5'	14981	51686	73° 09.0'
2000	14900	1540	49510	5° 54.1'	14979	51726	73° 10.0'
2001	14901	1569	49548	6° 00.6'	14983	51764	73° 10.5'
2002	14901	1599	49593	6° 07.5'	14987	51808	73° 11.1'
2003	14896	1632	49644	6° 15.1'	14985	51856	73° 12.2'
2004	14894	1660	49677	6° 21.6'	14986	51888	73° 12.8'
2005	14891	1689	49714	6° 28.3'	14986	51924	73° 13.5'

18.3 Disturbed Days

Year	X	Y	Z	D	H	F	I
1953	14959	879	48230	3° 21.8'	14985	50504	72° 44.4'
1954	14968	899	48264	3° 26.2'	14995	50540	72° 44.4'
1955	14967	924	48301	3° 32.0'	14995	50575	72° 45.2'
1956	14952	945	48344	3° 37.0'	14982	50612	72° 46.9'
1957	14959	961	48376	3° 40.5'	14990	50645	72° 47.0'
1958	14958	974	48407	3° 43.5'	14990	50675	72° 47.7'
1959	14963	986	48439	3° 46.2'	14995	50707	72° 47.9'
1960	14960	1004	48468	3° 50.4'	14994	50734	72° 48.6'
1961	14992	1005	48498	3° 50.1'	15026	50772	72° 47.2'
1962	15013	1013	48522	3° 51.6'	15047	50802	72° 46.3'
1963	15014	1025	48543	3° 54.3'	15049	50822	72° 46.6'
1964	15035	1027	48564	3° 54.5'	15070	50848	72° 45.6'
1965	15044	1030	48580	3° 55.0'	15079	50866	72° 45.3'
1966	15046	1033	48602	3° 55.7'	15081	50888	72° 45.6'
1967	15042	1034	48630	3° 55.9'	15077	50914	72° 46.5'
1968	15061	1028	48659	3° 54.3'	15096	50947	72° 45.8'
1969	15074	1019	48684	3° 52.0'	15108	50974	72° 45.5'
1970	15089	1011	48721	3° 50.0'	15123	51014	72° 45.4'
1971	15111	1006	48746	3° 48.5'	15144	51044	72° 44.5'
1972	15122	1007	48780	3° 48.6'	15155	51080	72° 44.4'
1973	15133	1013	48816	3° 49.8'	15167	51118	72° 44.4'
1974	15147	1019	48857	3° 50.9'	15181	51161	72° 44.3'
1975	15157	1027	48892	3° 52.6'	15192	51198	72° 44.3'
1976	15166	1042	48931	3° 55.8'	15202	51238	72° 44.5'
1977	15169	1061	48962	4° 00.1'	15206	51269	72° 44.8'
1978	15158	1086	49006	4° 05.9'	15197	51308	72° 46.3'
1979	15158	1103	49031	4° 09.7'	15198	51332	72° 46.7'
1980	15153	1120	49046	4° 13.6'	15194	51346	72° 47.2'
1981	15133	1146	49073	4° 19.8'	15176	51366	72° 48.9'
1982	15106	1166	49089	4° 24.8'	15151	51374	72° 50.9'
1983	15099	1184	49099	4° 29.0'	15145	51382	72° 51.4'
1984	15078	1203	49108	4° 33.7'	15126	51385	72° 52.8'
1985	15061	1219	49124	4° 37.6'	15110	51395	72° 54.1'
1986	15037	1237	49141	4° 42.2'	15088	51405	72° 55.9'
1987	15027	1250	49161	4° 45.3'	15079	51422	72° 56.9'
1988	15001	1268	49186	4° 49.9'	15054	51438	72° 58.9'
1989	14968	1287	49212	4° 54.9'	15023	51454	73° 01.4'
1990	14964	1296	49232	4° 57.0'	15020	51472	73° 02.0'
1991	14942	1313	49257	5° 01.3'	15000	51490	73° 03.8'
1992	14943	1324	49264	5° 03.8'	15002	51497	73° 03.8'
1993	14937	1348	49277	5° 09.4'	14998	51509	73° 04.3'
1994	14924	1373	49300	5° 15.4'	14987	51528	73° 05.5'
1995	14924	1398	49328	5° 21.1'	14989	51555	73° 05.9'
1996	14923	1425	49350	5° 27.3'	14991	51577	73° 06.2'
1997	14909	1457	49388	5° 34.9'	14980	51610	73° 07.6'
1998	14893	1489	49431	5° 42.6'	14967	51647	73° 09.3'
1999	14891	1517	49468	5° 49.0'	14968	51683	73° 09.9'
2000	14878	1547	49514	5° 56.2'	14958	51724	73° 11.4'
2001	14880	1576	49554	6° 02.8'	14963	51764	73° 11.9'
2002	14886	1604	49594	6° 09.0'	14972	51805	73° 12.1'
2003	14866	1643	49641	6° 18.4'	14957	51845	73° 14.0'
2004	14875	1669	49675	6° 24.1'	14968	51881	73° 13.9'
2005	14879	1696	49711	6° 30.2'	14975	51918	73° 14.1'

19 Earth's Magnetic Field Maps of Finland 2006.0

The isolines of total field (F) and horizontal field (H) are given in nanoteslas (nT), declination (D, positive eastwards) and inclination (I, positive downwards) in degrees of arc (see also www.geo.fmi.fi/MAGN/magncharts.html)

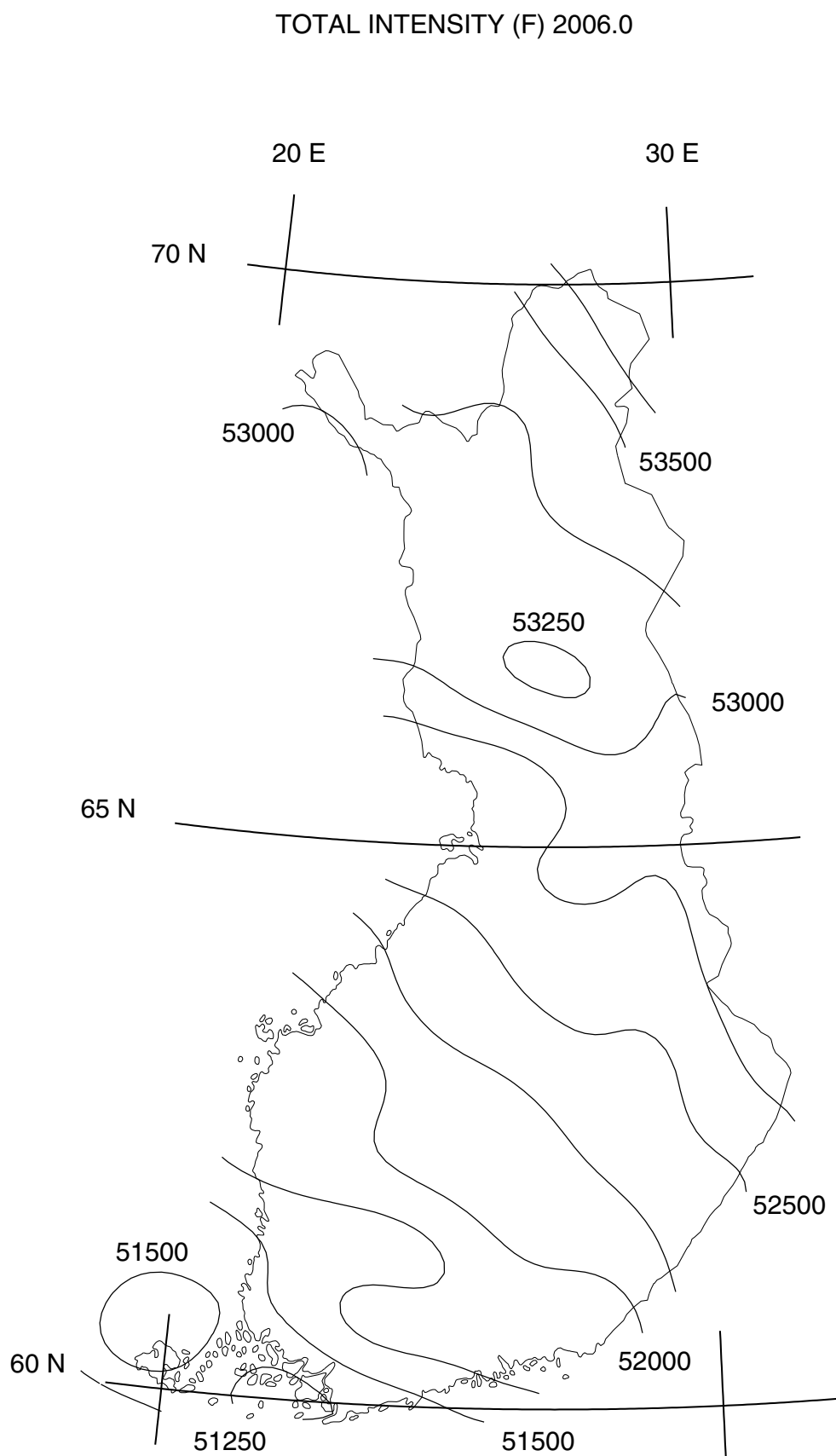


Figure 18: Total intensity F 2006.0 in nT

HORIZONTAL INTENSITY (H) 2006.0

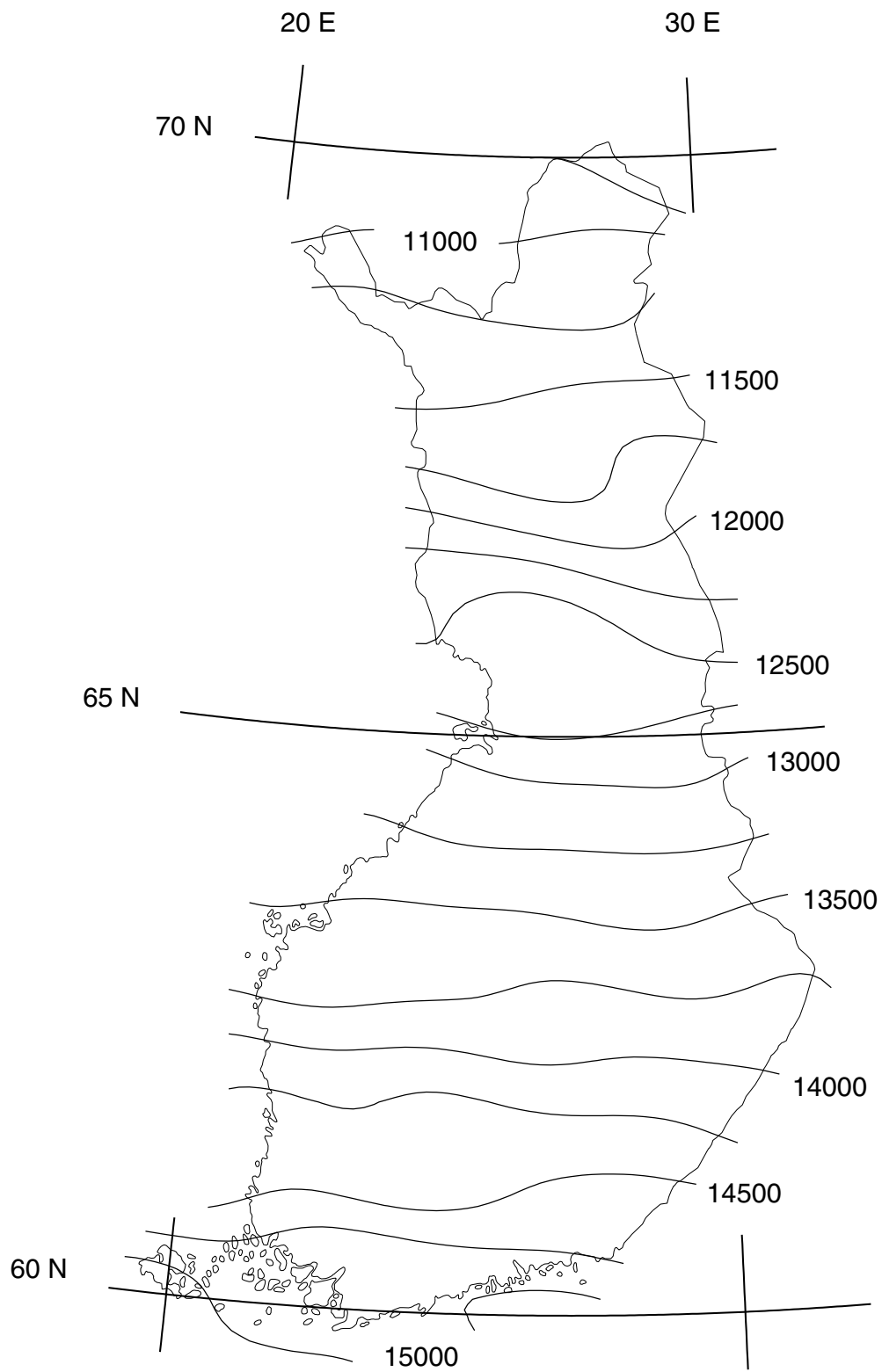


Figure 19: Horizontal intensity H 2006.0 in nT

DECLINATION (D) 2006.0

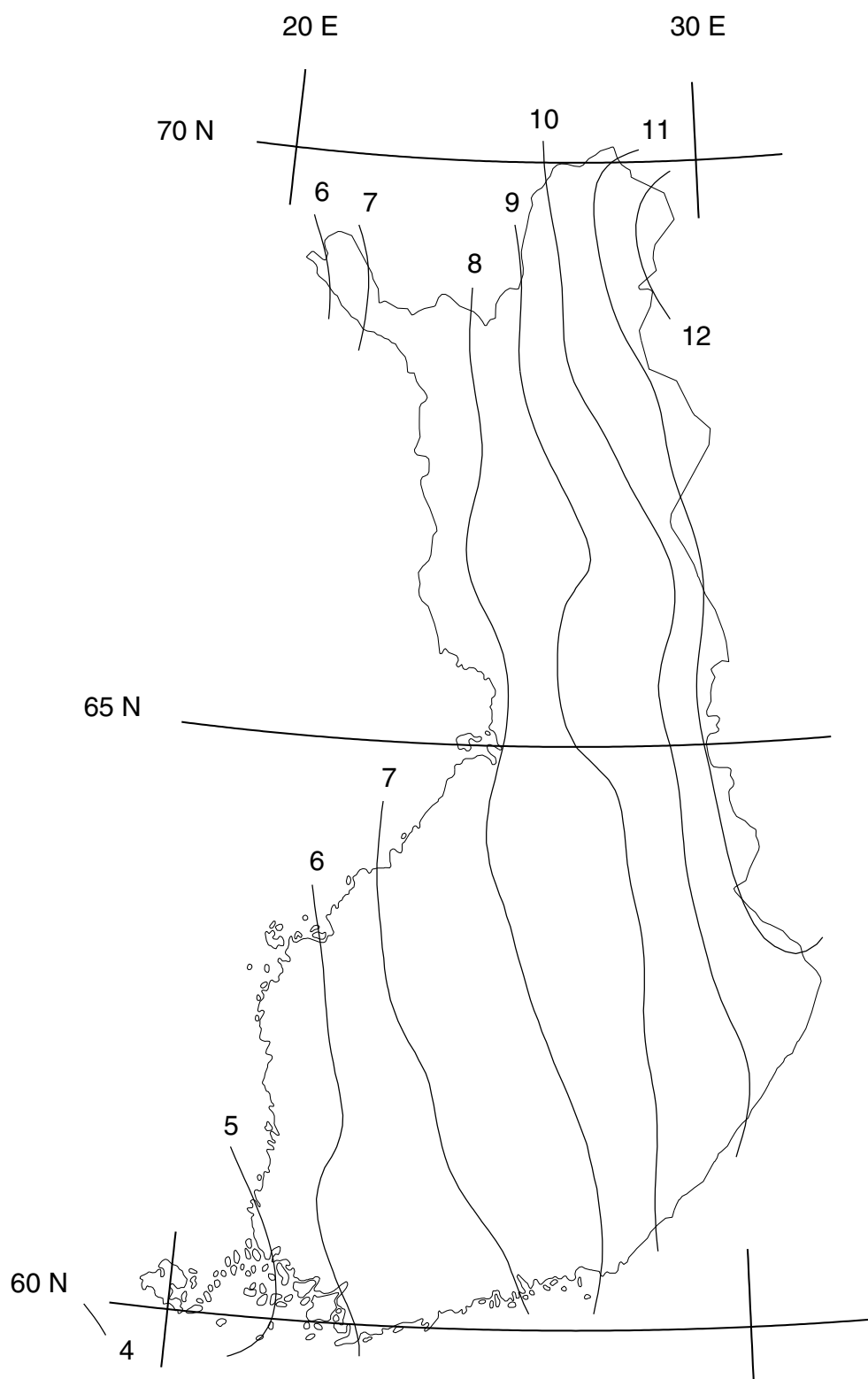


Figure 20: Declination D 2006.0 in degrees

INCLINATION (I) 2006.0

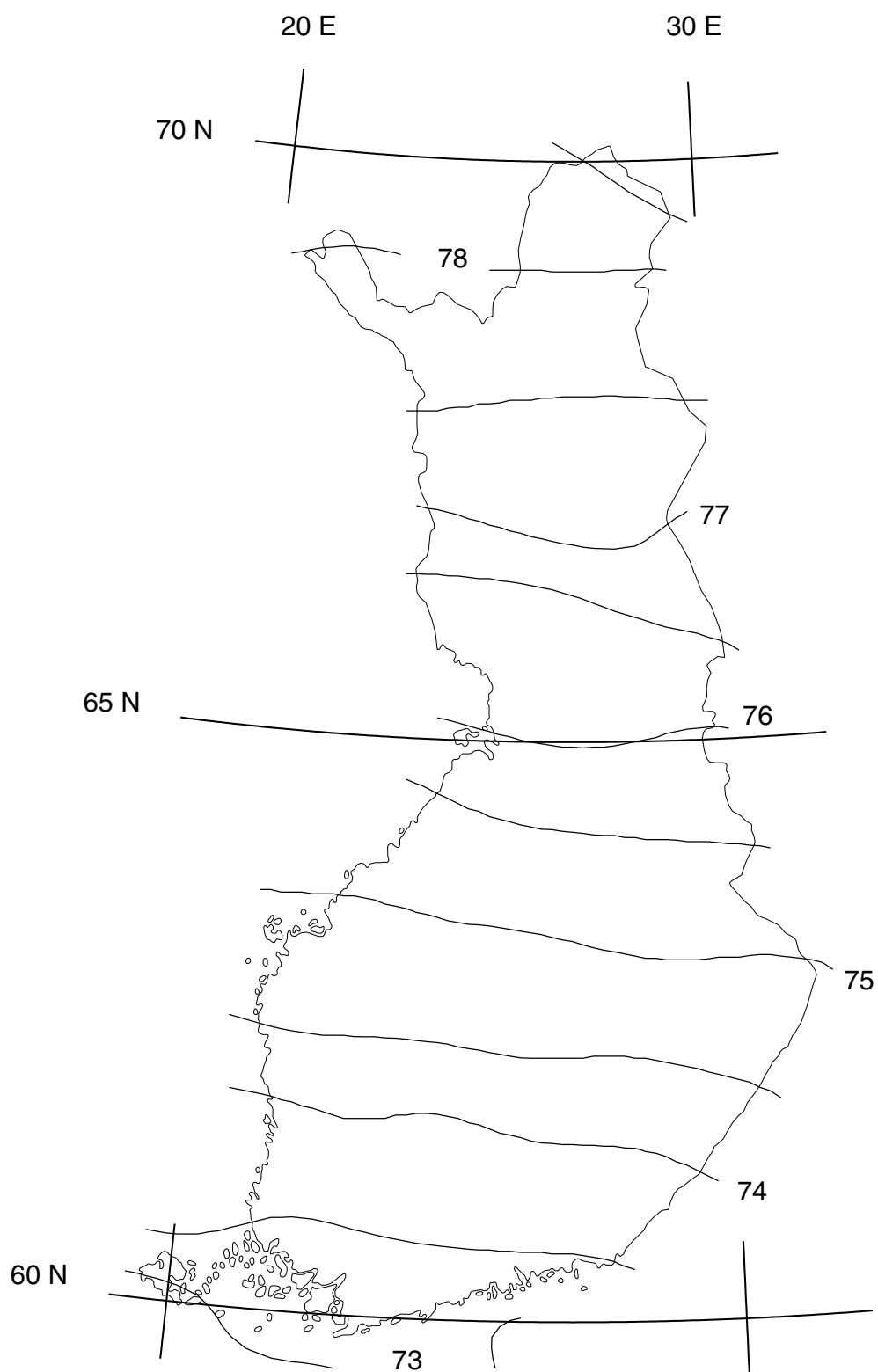


Figure 21: Inclination I 2006.0 in degrees

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